

**ELENCO delle pubblicazioni** allegate alla domanda ai fini della Procedura Pubblica di Selezione, per il reclutamento di n. 5 (cinque) ricercatori a tempo determinato con contratto di durata triennale a tempo pieno, ai sensi dell'art. 24 comma 3 lettera b) della Legge n. 240/2010, presso il Dipartimento di Ingegneria dell'Università degli Studi di Roma Tre, pubblicato sulla Gazzetta Ufficiale della Repubblica n. 58 del 24/07/2018.

**Dipartimento di Ingegneria 1 posto.**

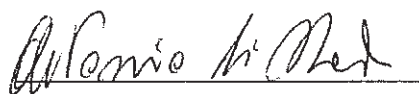
**Settore Concorsuale 09/H1 Sistemi di Elaborazione delle Informazioni.**

**SSD ING-INF/05 Sistemi di Elaborazione delle Informazioni**

Antonio di Noia

1. Tesi di Dottorato XXVII Ciclo - *"Predizione del rischio di malattie lavoro-correlate attraverso analisi di clustering e ottimizzazione genetica"*
2. *"Occupational Diseases Risk Prediction by Genetic Optimization Towards a Non-exclusive Classification Approach"* - Capitolo 5 di Computational Intelligence
3. *"Occupational Diseases Risk Prediction by Cluster Analysis and Genetic Optimization"* - Pubblicazione a conferenza ECTA - IJCCI ottobre 2014
4. *"Quinto rapporto INAIL-Regioni sulle malattie professionali - MALPROF 2007-2008"*
5. *"Quarto rapporto ISPESL-Regioni sulle malattie professionali - MALPROF 2005-2006"*
6. *"Il software per l'inserimento degli eventi (Versione 2.0)"* - Manuale utente del software per l'inserimento degli eventi per il sistema nazionale di sorveglianza degli infortuni mortali sul lavoro
7. *"MaProWeb -- Applicativo web based per l'inserimento delle segnalazioni di malattie professionali raccolte dai servizi di prevenzione dell'ASL (Versione 1.1)"* - Manuale utente del software
8. *"Il sistema di sorveglianza MalProf per le patologie correlate al lavoro"* - Articolo in GIMLE (Giornale Italiano di Medicina del Lavoro ed Ergonomia)
9. *"Il Sistema di sorveglianza MALPROF delle patologie correlate al lavoro basato sulle segnalazioni dirette ai Dipartimenti di Prevenzione delle ASL"* - Poster al convegno: "Il Ccm per la prevenzione"
10. *"Applicazione OLTP (On Line Transaction Processing) web-based MaproWeb (per l'inserimento delle segnalazioni di malattie professionali raccolte dai servizi di prevenzione delle ASL)"* - Applicazione web.
11. *"Applicazione OLTP (On Line Transaction Processing) web-based per l'inserimento dei casi di infortuni mortali e gravi"* - Applicazione web.

Roma li 23/08/2018



## FABIO GALASSO

### Elenco Pubblicazioni Presentate e Tesi

#### Elenco delle Pubblicazioni presentate

- 1 I. Hasan, F. Setti, T. Tsesmelis, A. Del Bue, F. Galasso, M. Cristani  
**MX-LSTM: mixing tracklets and vislets to jointly forecast trajectories and head poses**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
Salt Lake City, USA, June 2018 [\[link to pdf\]](#)  
(spotlight oral presentation acceptance rate 6.6%)  
Citations: 1 (Google scholar)  
Conference H5-index (Google scholar): 158; Conference CORE'17 rating: A  
Conference H-index (SCImago): 240 (in 2017)  
SCImago Journal Rank: 2.616 (in 2017)
- 2 I. Hasan, F. Setti, T. Tsesmelis, A. Del Bue, M. Cristani, F. Galasso  
**"Seeing is Believing": Pedestrian Trajectory Forecasting Using Visual Frustum of Attention**  
In *Proc. IEEE Winter Conf. on Applications of Computer Vision (WACV)*  
Lake Tahoe, USA, March 2018 [\[link to pdf\]](#) [\[link oral presentation\]](#)  
(Acceptance rate 37%)  
Conference H5-index (Google scholar): 31; Conference CORE'17 rating: A  
Conference H-index (SCImago): 13 (in 2015)  
SCImago Journal Rank: 0.485 (in 2015)
- 3 I. Hasan, T. Tsesmelis, F. Galasso, A. Del Bue, M. Cristani  
**Tiny head pose classification by bodily cues**  
In *Proc. International Conference on Image Processing (ICIP)*  
Beijing, China, September 2017 [\[link to pdf\]](#)  
Acceptance rate 45%  
ISBN: 978-150902175-8; DOI: <https://doi.org/10.1109/ICIP.2017.8296765>  
Scopus ID: 2-s2.0-85045349927  
Citations: 2 (Google scholar), 18 (Scopus)  
Conference H5-index (Google scholar): 24; Conference CORE'17 rating: B  
Conference H-index (SCImago): 63
- 4 Sikandar Amin and Fabio Galasso  
**Geometric Proposals for Faster R-CNN**  
In *Proc. IEEE Int. Conf. on Adv. Video and Signal based Surveill. (AVSS)*  
*International Workshop on Traffic and Street Surveillance*  
**1<sup>st</sup> place** in the **DETRAC** car detection competition  
Lecce, Italy, August 2017 [\[link to pdf\]](#) [\[competition results\]](#)  
ISBN: 978-1-5386-2939-0; DOI: 10.1109/AVSS.2017.8078518  
Scopus ID: 2-s2.0-85039906417  
Conference H-index (Aminer): 19; Conference H5-index (Google scholar): 20  
Conference H-index (SCImago): 10; Conference CORE'17 rating: B  
SCImago Journal Rank: 0.592 (in 2016)



- 5 Wei-Chen Chiu, Fabio Galasso and Mario Fritz  
**Towards Segmenting Consumer Stereo Videos: Benchmark, Baselines and Ensembles**  
In *Proc. Asian Conference on Computer Vision (ACCV)*  
Taipei, Taiwan, November 2016 [\[link to web\]](#)  
Acceptance rate 25%  
ISBN: 978-331954192-1; DOI: 10.1007/978-3-319-54193-8\_24  
Scopus ID: 2-s2.0-85016290135  
Conference H-index (Aminer): 14; Conference H5-index (Google scholar): 35  
Conference CORE'17 rating: B
- 6 Anna Khoreva, Fabio Galasso, Matthias Hein and Bernt Schiele  
**Classifier Based Graph Construction for Video Segmentation**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
Boston (MA), USA, June 2015 [\[link to pdf\]](#)  
Acceptance rate 28%  
ISBN: 978-146736964-0; DOI: 10.1109/CVPR.2015.7298697  
Scopus ID: 2-s2.0-84959185781  
Citations: 41 (Google scholar), 29 (Scopus)  
Conference H-index (Aminer): 112; Conference H5-index (Google scholar): 158  
Conference H-index (SCImago): 192; Conference CORE'17 rating: A  
SCImago Journal Rank: 4.163 (in 2015)
- 7 Fabio Galasso, Margret Keuper, Thomas Brox and Bernt Schiele  
**Spectral Graph Reduction for Efficient Image and Streaming Video Segmentation**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
Columbus, Ohio, June 2014 [\[link to pdf\]](#)  
Oral presentation Acceptance rate 5.75%  
ISBN: 978-147995117-8; DOI: 10.1109/CVPR.2014.14  
Scopus ID: 2-s2.0-84911442567  
Citations: 65 (Google scholar), 44 (Scopus)  
Conference H-index (Aminer): 112; Conference H5-index (Google scholar): 158  
Conference H-index (SCImago): 192; Conference CORE'17 rating: A  
SCImago Journal Rank: 3.097 (in 2014)
- 8 Fabio Galasso, Naveen Nagaraja, T. Cardenas, Thomas Brox and Bernt Schiele  
**A Unified Video Segmentation Benchmark: Annotation, Metrics and Analysis**  
In *Proc. International Conference on Computer Vision (ICCV)*  
Sydney, Australia, December 2013 [\[link to pdf\]](#)  
Acceptance rate 28%  
ISBN: 978-147992839-2; DOI: 10.1109/ICCV.2013.438  
Scopus ID: 2-s2.0-84898817849  
Citations: 122 (Google scholar), 69 (Scopus)  
Conference H-index (Aminer): 58; Conference H5-index (Google scholar): 89  
Conference H-index (SCImago): 138; Conference CORE'17 rating: A\*  
SCImago Journal Rank: 1.837 (in 2013)



- 9 Fabio Galasso, Roberto Cipolla and Bernt Schiele  
**Video Segmentation with Superpixels**  
In *Proc. Asian Conference on Computer Vision (ACCV)*  
Daejeon, Korea, November 2012 [\[link to pdf\]](#)  
Acceptance rate 26%  
ISBN: 978-364237330-5; DOI: 10.1007/978-3-642-37331-2\_57  
Scopus ID: 2-s2.0-84875907931  
Citations: 99 (Google scholar), 43 (Scopus)  
Conference H-index (Aminer): 14; Conference H5-index (Google scholar): 35  
Conference CORE'17 rating: B
- 10 Fabio Galasso, Masahiro Iwasaki, Kunio Nobori and Roberto Cipolla  
**Spatio-Temporal Clustering of Probabilistic Region Trajectories**  
In *Proc. International Conference on Computer Vision (ICCV)*  
Barcelona, Spain, November 2011 [\[link to pdf\]](#)  
Acceptance rate 24%  
ISBN: 978-145771101-5; DOI: 10.1109/ICCV.2011.6126438  
Scopus ID: 2-s2.0-84856657251  
Citations: 16 (Google scholar), 15 (Scopus)  
Conference H-index (Aminer): 58; Conference H5-index (Google scholar): 89  
Conference H-index (SCImago): 138; Conference CORE'17 rating: A\*  
SCImago Journal Rank: 1.837 (in 2011)
- 11 Vijay Badrinarayanan, Fabio Galasso and Roberto Cipolla  
**Label Propagation in Video Sequences**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
San Francisco (CA), USA, June 2010 [\[link to pdf\]](#)  
Acceptance rate 27%  
ISBN: 978-142446984-0; DOI: 10.1109/CVPR.2010.5540054  
Scopus ID: 2-s2.0-77956004355  
Citations: 95 (Google scholar), 66 (Scopus)  
Conference H-index (Aminer): 112; Conference H5-index (Google scholar): 158  
Conference H-index (SCImago): 192; Conference CORE'17 rating: A  
SCImago Journal Rank: 0.329 (in 2010)
- 12 Fabio Galasso and Joan Lasenby  
**Fourier Analysis and Gabor Filtering for Texture Analysis and Local Reconstruction of General Shapes**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
Miami (FL), USA, June 2009 [\[link to pdf\]](#)  
Acceptance rate 26%  
ISBN: 978-142443993-5; DOI: 10.1109/CVPRW.2009.5206591  
Scopus ID: 2-s2.0-70450194974  
Citations: 10 (Google scholar), 4 (Scopus)  
Conference H-index (Aminer): 112; Conference H5-index (Google scholar): 158  
Conference H-index (SCImago): 192; Conference CORE'17 rating: A  
SCImago Journal Rank: 0.826 (in 2010)





2009

Fabio Galasso

**Shape-From-Texture: Spectral Distortion Analysis and 3D Reconstruction Algorithms**

PhD Thesis, Submitted on 15th July 2009 [[link to pdf](#)]



Dr. Fabio Galasso

Garching bei München, 4 August 2018

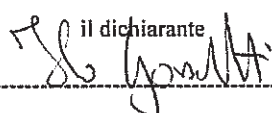



www.AlboPreparatoriOnline.it

ELENCO DELLE PUBBLICAZIONI E TESI DI DOTTORATO  
AI FINI DELLA VALUTAZIONE COMPARATIVA

1. Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Temporal people-to-people recommendation on social networks with sentiment-based matrix factorization. Future Generation Computer Systems, 78:430-439, 2018. ISSN 0167-739X. (file FGCS2018.pdf)
2. Fabio Gasparetti, Carlo De Medio, Carla Limongelli, Filippo Sciarrone, and Marco Temperini. Prerequisites between learning objects: Automatic extraction based on a machine learning approach. Telematics and Informatics, 35(3):595-610, 2017. ISSN 0736-5853. (file TI2017.pdf)
3. Carlo De Medio, Fabio Gasparetti, Carla Limongelli, Filippo Sciarrone, and Marco Temperini. Course-driven teacher modeling for learning objects recommendation in the moodle lms. In Adjunct Publication of the 25th Conference on User Modeling, Adaptation and Personalization, UMAP '17, pages 141-145, New York, NY, USA, 2017. ACM. ISBN 978-1-4503-5067-9. (file UMAP2017.pdf)
4. Fabio Gasparetti. Personalization and context-awareness in social local search: State-of-the-art and future research challenges. Pervasive and Mobile Computing, 38(2):446-473, 2017. ISSN 1574-1192. (file PMC2016.pdf)
5. Fabio Gasparetti. Modeling user interests from web browsing activities. Data Mining and Knowledge Discovery, 31(2):502-547, 2017. ISSN 1573-756X. (file DMKD2016.pdf)
6. Carlo De Medio, Fabio Gasparetti, Carla Limongelli, Filippo Sciarrone, and Marco Temperini. Automatic extraction of prerequisites among learning objects using wikipedia-based content analysis. In Proc. of 13th International Conference, ITS 2016, Zagreb, Croatia, June 7-10, 2016. Volume 9684 of Lecture Notes in Computer Science, pages 375-381. Springer, 2016. ISBN 978-3-319-39582-1. (file ITS2016.pdf)
7. Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Interest and sentiment-based community detection for user recommendation on twitter. In Proc. of 22nd International Conference, UMAP 2014, Aalborg, Denmark, July 7-11, 2014. Volume 8538 of Lecture Notes in Computer Science, pages 314-319. Springer, 2014. ISBN 978-3-319-08785-6. (file UMAP2014.pdf)
8. Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Social semantic query expansion. ACM TIST, 4(4):60:1-60:43, 2013. (file ACMTIST2013SSQ.pdf)
9. Claudio Biancalana, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. An approach to social recommendation for context-aware mobile services. ACM TIST, 4(1):10:1-10:31, 2013. (file ACMTIST2013ASR.pdf)
10. Giuliano Arru, Davide Feltoni Gurini, Fabio Gasparetti, Alessandro Micarelli, and Giuseppe Sansonetti. Signal-based user recommendation on twitter. In Proc. of 22nd International World Wide Web Conference, WWW '13, Rio de Janeiro, Brazil, May 13-17, 2013, Companion Volume, pages 941-944. International World Wide Web Conferences Steering Committee / ACM, 2013. ISBN 978-1-4503-2038-2. (file WWW2013.pdf)
11. Fabio Gasparetti, Alessandro Micarelli, and Filippo Sciarrone. A web-based training system for business letter writing. Knowledge-Based Systems, 22(4):287-291, 2009. (file KBS2009.pdf)
12. Fabio Gasparetti and Alessandro Micarelli. Personalized search based on a memory retrieval theory. IJPRAI, 21(2):207-224, 2007. (file IJPRAI2007.pdf)
13. Fabio Gasparetti. Adaptive Web Search: User Modeling based on Associative Memory and Multi-Agent Focused Crawling. Tesi di Dottorato in Informatica e Automazione XVII Ciclo, 2005. (file tesi-di-dottorato.pdf)

Roma, 3 agosto 2018

il dichiarante  
  


Elenco pubblicazioni selezionate:

1. M. Barni, P. Failla, V. Kolesnikov, R. Lazzeretti, A.R. Sadeghi, and T. Schneider. "Secure evaluation of private linear branching programs with medical applications". In European Symposium on Research In Computer Security (ESORICS) 2009, Vol. 5789 of Lecture Notes in Computer Science pp 424-439, Springer, Saint Malo, France, September 2009, ISBN: 978-3-642-04443-4, DOI: 10.1007/978-3-642-04444-1\_26, AR 0.19, Core A, GS 95, SC 45, WS 16
2. M. Barni, T. Bianchi, D. Catalano, R. Di Raimondo, R. Donida Labati, P. Failla, D. Fiore, R. Lazzeretti, V. Piuri, A. Piva, and F. Scotti. "Privacy-Preserving Fingerprint Authentication". In ACM Workshop on Multimedia and Security (MM&Sec) 2010, pp.231-240, Rome, Italy, 09 September 2010, ISBN: 978-1-4503-0286-9, DOI: 10.1145/1854229.1854270, Core C, GS 162, SC 89
3. M. Barni, P. Failla, R. Lazzeretti, A.-R. Sadeghi, and T. Schneider. "Privacy-preserving ECG classification with branching programs and neural networks". IEEE Transactions on Information Forensics and Security, Vol. 6 No. 2, pp 452-468, June 2011, ISSN: 1556-6013, DOI: 10.1109/TIFS.2011.2108650, IF (2011): 1.340, GS 131, SC 62, WS 40
4. R. Lazzeretti, J. Guajardo, and M. Barni. "Privacy Preserving ECG Quality Evaluation". In Proceedings of ACM workshop on Multimedia and security (MM&SEC) 2012, pp. 165-174, COVENTRY, UK, 06 September 2012, ISBN: 978-1-4503-1417-6 DOI: 10.1145/2361407.2361435, AR 0.48, Core C, GS 20, SC 6
5. R. Lazzeretti and M. Barni. Private Computing with Garbled Circuits [Application Corner]. IEEE Signal Processing Magazine, Special Issue on Signal Processing in the Encrypted Domain: when Cryptography Meets Signal Processing, March 2013, ISSN: 1053-5888, DOI: 10.1109/MSP.2012.2230540, IF(2013): 4.481, GS 9, SC 7, WS 5
6. M. Barni, M. Bernaschi, R. Lazzeretti, T. Pignata, and A. Sabellico. "Parallel Implementation of GC-Based MPC Protocols in the Semi-Honest Setting". In International Workshop on Data Privacy Management and Autonomous Spontaneous Security, DPM 2013. Springer, 2013 Egham, UK, September 12-13, 2013. ISBN: 978-3-642-54567-2, DOI: 10.1007/978-3-642-54568-9\_5, GS 9, SC 1, WS 1
7. M. Barni, G. Droandi, and R. Lazzeretti. "Privacy protection in biometric-based recognition systems: A marriage between cryptography and signal processing". IEEE Signal Processing Magazine, Vol. 32 No. 5 pp 66-76, September 2015, ISSN: 1053-5888, DOI: 10.1109/MSP.2015.2438131, IF(2015) 6.671, GS 22, SC 14, WS 13
8. R. Lazzeretti, T. Pignata, M. Barni, "Piecewise Function Approximation With Private Data," in IEEE Transactions on Information Forensics and Security, Vol.11, No.3, pp.642-657, March 2016, ISSN: 1556-6013, DOI: 10.1109/TIFS.2015.2503268, IF(2016): 4.332, GS 2, SC 2, WS 2
9. G. Laurenza, L. Aniello, R. Lazzeretti, and R. Baldoni. "Malware Triage based on Static Features and Public APT Reports". International Symposium on Cyber Security Cryptography and Machine Learning (CSCML), 2017 pp. 288-305 Be'er Sheva, Israel, 29 June 2017, ISBN: 978-3-319-60079-6, DOI: 10.1007/978-3-319-60080-2\_21
10. M. Conti, D. Lain, R. Lazzeretti, G. Lovisotto, and W. Quattrociocchi. "It's Always April Fools' Day! On the Difficulty of Social Network Misinformation Classification via Propagation Features". Workshop on Information Forensic and Security, WIFS 2017, Special session on Social networks and user-generated content verification, 2017, IEEE, Rennes, FR, December 4 - 7, 2017, ISBN: 978-1-5090-6769-5, DOI: 10.1109/WIFS.2017.8267653, GS 6
11. M. Ambrosin, P. Braca, M. Conti, and R. Lazzeretti. "ODIN: Obfuscation-based privacy preserving consensus algorithm for Decentralized Information Fusion in smart device Networks". ACM Transactions on Internet Technology (TOIT), special issue on emerging Technologies for Connected Communities, 2017. Vol 18 Issue 1. No. 6 pp. 1-22, December 2017, ISSN 1533-5399, DOI: 10.1145/3137573, IF(2017): 1.727
12. Y. Luo, S. Cheung, R. Lazzeretti, T. Pignata, and M. Barni. "Anonymous subject identification and privacy information management in video surveillance". Springer International Journal of Information Security, June 2018 Vol. 17, Issue 3 pp.261-278, ISSN 1615-5262, DOI: 10.1007/s10207-017-0380-2, GS: 1, IF(2017): 1.658.

Legenda:

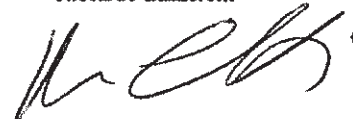
- AR: Acceptance Rate
- GS: Google Scholar citations
- IF: Impact Factor (year)
- Sc: Scopus citations
- WS: Web of Science citation
- Core: Conference rank, Core2018

Tesi di dottorato:

- R. Lazzeretti. Privacy Preserving Processing of Biomedical Signals with Application to Remote Healthcare Systems. PhD thesis, PhD school of the University of Siena, Information Engineering and Mathematical Science Department, November 2012. Tutor: Prof. Mauro Barni

Data 23/08/2018

Riccardo Lazzeretti




Procedura selettiva di chiamata per un posto di Ricercatore a tempo determinato – Tipologia B, presso il Dipartimento di Ingegneria dell'Università degli Studi Roma TRE, Settore concorsuale 09/H1, Settore scientifico-disciplinare ING-INF/05, pubblicato sulla Gazzetta Ufficiale – IV serie speciale n. 58 del 24/07/2018

## Elenco delle 12 pubblicazioni presentate dal candidato e Tesi di Dottorato

Si noti che la qualità di ciascuna pubblicazione presentata dal candidato è valutata utilizzando indicatori riconosciuti dalla comunità scientifica internazionale. Nello specifico:

1. Per i contributi in atti di convegno, la qualità della conferenza è valutata in base agli indicatori:
  - GII-GRIN (A++, A+: excellent, top notch conferences, A, A-: very good events)  
➤ <http://gii-grin-scie-rating.scie.es/ratingSearch.jsf>
  - CORE (A\*: top 4%, A: top 14%)  
➤ <http://portal.core.edu.au/conf-ranks/>
2. Per gli articoli in rivista, la valutazione dell'IMPACT FACTOR è valutata utilizzando gli indicatori:
  - Incites Journal Citation Reports (JCR), che calcola l'impact factor totale della rivista fino al 2016, e quello degli ultimi 5 anni (2012-2016).  
➤ <https://jcr.incites.thomsonreuters.com/>
  - (In assenza di JCR) Impact Factor (IF) riportato sulla pagina web della rivista.
  - SCImago Journal Rank (SJR), che misura l'influenza scientifica di una rivista (aggiornato al 2016), e può variare da Q1 (top) a Q4.  
➤ <http://www.scimagojr.com/>

Nr.	Anno	Pubblicazione	Impact Factor	Ranking Class	Citazioni
1	2018	<b>[Articolo in rivista]</b> A. Augusto, R. Conforti, M. Dumas, M. La Rosa, F. M. Maggi, A. Marrella, M. Mecella, A. Soo <i>"Automated Discovery of Process Models from Event Logs: Review and Benchmark"</i> In: IEEE Transactions on Knowledge and Data Engineering (ISSN 1041-4347), IEEE, 2018	JCR 3.438/3.899 SJR Q1	----	24 [G.Scholar] 0 [Scopus]



2	2018	<p><b>[Contributo in Atti di convegno]</b></p> <p>M. de Leoni, G. Lanciano, <b>A. Marrella</b></p> <p><i>"Aligning Partially-Ordered Process-Execution Traces and Models Using Automated Planning"</i></p> <p>In: 28<sup>th</sup> Int. Conference on Automated Planning and Scheduling (ICAPS 2018), AAAI Press, Delft, the Netherlands, 24-29 June 2018</p>	----	<p>A* [CORE]</p> <p>A [GII-GRIN]</p>	<p>0 [G.Scholar]</p> <p>N/A* [Scopus]</p> <p>*This contribution is not yet indexed in Scopus</p>
3	2018	<p><b>[Contributo in Atti di convegno]</b></p> <p><b>A. Marrella</b>, T. Catarci</p> <p><i>"Measuring the Learnability of Interactive Systems Using a Petri Net Based Approach"</i></p> <p>In: 2018 International Conference on Designing Interactive Systems (DIS '18), ACM, Hong Kong, China, 9-13 June 2018</p>	----	A- [GII-GRIN]	<p>0 [G.Scholar]</p> <p>N/A* [Scopus]</p> <p>*This contribution is not yet indexed in Scopus</p>
4	2018	<p><b>[Articolo in rivista]</b></p> <p><b>A. Marrella</b>, M. Mecella, S. Sardina</p> <p><i>"Supporting Adaptiveness of Cyber-Physical Processes through Action-based Formalisms"</i></p> <p>In: AI Communications (ISSN 0921-7126), Volume 31, Issue 1, IOS Press, 2018</p>	JCR 0.654/0.871 SJR Q2/Q3	----	<p>2 [G.Scholar]</p> <p>0 [Scopus]</p>
5	2017	<p><b>[Articolo in rivista]</b></p> <p><b>A. Marrella</b>, Y. Lespérance</p> <p><i>"A planning approach to the automated synthesis of template-based process models"</i></p> <p>In: Service Oriented Computing and Applications (ISSN 1863-2386), Volume 11, Issue 4, Springer London, December 2017</p>	IF 1.691 SJR Q1/Q2	----	<p>1 [G.Scholar]</p> <p>1 [Scopus]</p>
6	2017	<p><b>[Articolo in rivista]</b></p> <p>M. de Leoni, <b>A. Marrella</b></p> <p><i>"Aligning Real Process Executions and Prescriptive Process Models through Automated Planning"</i></p>	JCR 3.928/3.526 SJR Q1	----	<p>13 [G.Scholar]</p> <p>7 [Scopus]</p>



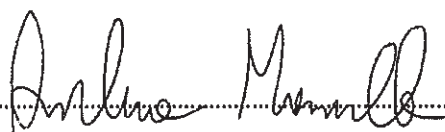
		In: Expert Systems with Applications (ISSN 0957-4174), Volume 82, Elsevier, October 2017			
7	2017	<p><b>[Contributo in Atti di convegno]</b></p> <p>P. Plebani, <b>A. Marrella</b>, M. Mecella, M. Mizmizi, B. Pernici</p> <p><i>"Multi-party Business Process Resilience By-Design: A Data-centric Perspective"</i></p> <p><b>Best Paper Award</b> at: 29th International Conference on Advanced Information Systems Engineering (CAISE 2017), Springer International Publishing, Essen, Germany, 12-16 June 2017</p>	----	A [CORE] A [GII-GRIN]	2 [G.Scholar] 1 [Scopus]
8	2017	<p><b>[Contributo in Atti di convegno]</b></p> <p>G. De Giacomo, F. M. Maggi, <b>A. Marrella</b>, F. Patrizi</p> <p><i>"On the Disruptive Effectiveness of Automated Planning for LTLf-based Trace Alignment"</i></p> <p>In: Thirty-First AAAI Conference on Artificial Intelligence (AAAI 2017), San Francisco, USA, 4-9 February 2017</p>	----	A* [CORE] A++ [GII-GRIN]	10 [G.Scholar] 6 [Scopus]
9	2017	<p><b>[Articolo in rivista]</b></p> <p><b>A. Marrella</b>, M. Mecella, S. Sardina</p> <p><i>"Intelligent Process Adaptation in the SmartPM System"</i></p> <p>In: ACM Transactions on Intelligent Systems and Technology (ISSN 2157-6904), Volume 8, Issue 2, January 2017</p>	JCR 3.196/10.473 SJR Q1	----	14 [G.Scholar] 7 [Scopus]
10	2016	<p><b>[Contributo in Atti di convegno]</b></p> <p>G. De Giacomo, F. M. Maggi, <b>A. Marrella</b>, S. Sardina</p> <p><i>"Computing Trace Alignment against Declarative Process Models through Planning"</i></p> <p>In: 26th International Conference on Automated Planning and Scheduling (ICAPS 2016), AAAI Press, London, UK, 12-17 June 2016</p>	----	A* [CORE] A [GII-GRIN]	9 [G.Scholar] 5 [Scopus]

11	2015	<b>[Articolo in rivista]</b> C. Di Ciccio, <b>A. Marrella</b> , A. Russo <i>"Knowledge-Intensive Processes: Characteristics, Requirements and Analysis of Contemporary Approaches"</i> In: Journal on Data Semantics (ISSN 1861-2032), Volume 4, Issue 1, Springer Berlin Heidelberg, March 2015	IF 1.501 SJR Q1/Q2	----	113 [G.Scholar] 70 [Scopus]
12	2014	<b>[Contributo in Atti di convegno]</b> <b>A. Marrella</b> , M. Mecella, S.Sardina <i>"SmartPM: An Adaptive Process Management System through Situation Calculus, IndiGolog, and Classical Planning"</i> In: 14th International Conference on Principles of Knowledge Representation and Reasoning (KR 2014), AAAI Press, Vienna, Austria, 20-24 July 2014	-----	A* [CORE] A+ [GIL-GRIN]	33 [G.Scholar] 23 [Scopus]
PhD	2013	<b>[Tesi di Dottorato]</b> A. Marrella <i>"SmartPM: Automatic Adaptation of Dynamic Processes at Run-Time"</i> PhD Thesis in Engineering in Computer Science (Cycle XXV), Sapienza Università di Roma, Italy. October 2013	Disponibile per il download al link: <a href="https://goo.gl/DUVr3P">https://goo.gl/DUVr3P</a>		

Il sottoscritto dichiara inoltre di essere informato, ai sensi del Decreto legislativo 30.06.2003, n. 196, che i dati personali raccolti saranno trattati, anche con strumenti informatici, esclusivamente nell'ambito del procedimento per il quale la presente dichiarazione viene resa.

Roma, 16 Agosto 2018

Firma .....



(non soggetta ad autentica ai sensi dell'art. 39 del D.P.R. 28.12.2000, n. 445)



Lista delle pubblicazioni selezionate.

- 1- Cucchiarelli, A., Morbidoni, C., Stilo, G., Velardi, P., A Topic Recommender for Journalists, (2018) Information Retrieval Journal (DOI: 10.1007/s10791-018-9333-2)
- 2- Baierer, K., Dröge, E., Eckert, K., Goldfarb, D., Iwanowa, J., Morbidoni, C., Ritze, D., DM2E: A Linked Data source of Digitised Manuscripts for the Digital Humanities, (2017) Semantic Web, Volume 8, Issue 5, Pages 733-745. (DOI: 10.3233/SW-160234)
- 3- Grassi, M., Morbidoni, C., Nucci, M., Fonda, S., Piazza, F., Pundit: Augmenting web contents with semantics, (2013) Literary and Linguistic Computing, 28 (4), art. no. fqt060, pp. 640-659. (DOI: 10.1093/lc/fqt060)
- 4- Grassi, M., Morbidoni, C., Nucci, M., A Collaborative Video Annotation System Based on Semantic Web Technologies, (2012) Cognitive Computation, 4 (4), pp. 497-514. (DOI: 10.1007/s12559-012-9172-1)
- 5- Tummarello, G., Morbidoni, C., Puliti, P., Piazza, F., A proposal for textual encoding based on semantic web tools, (2008) Online Information Review, 32 (4), pp. 467-477. (DOI: 10.1108/14684520810897340)
- 6- Tummarello, G., Morbidoni, C., The DBin platform: A complete environment for Semantic Web Communities, (2008) Web Semantics, 6 (4), pp. 257-265. (DOI: 10.1016/j.websem.2008.08.002)
- 7- Le-Phuoc, D., Polleres, A., Hauswirth, M., Tummarello, G., Morbidoni, C., Rapid prototyping of Semantic mash-ups through Semantic Web Pipes, (2009) WWW'09 - Proceedings of the 18th International World Wide Web Conference, pp. 581-590, 18th International World Wide Web Conference (WWW), 2009. (DOI: 10.1145/1526709.1526788)
- 8- Tummarello, G., Morbidoni, C., Bachmann-Gmür, R., Erling, O., RDFSync: Efficient remote synchronization of RDF models, 6th International Semantic Web Conference, ISWC 2007 and 2nd Asian Semantic Web Conference (ASWC), 2007. (DOI: 10.1007/978-3-540-76298-0\_39)
- 9- Cucchiarelli, A., Morbidoni, C., Stilo, G., Velardi, P., What to Write and Why: a Recommender for News Media (2018), 33rd ACM SIGAPP Symposium On Applied Computing, Pau, France, April 9 – 13, 2018.
- 10- Morbidoni, C., Cucchiarelli, A., Ursino, D., Leveraging linked entities to estimate focus time of short texts, Proceedings of the 22nd International Database Engineering and Applications Symposium (IDEAS 2018), pp. 282-286, Villa San Giovanni, Italy, 2018 (DOI: 10.1145/3216122.3216158)
- 11- Tummarello, G., Morbidoni, C., Nucci, M., Enabling semantic web communities with DBin: An overview, (2006) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 4273 LNCS, pp. 943-950, 5th International Semantic Web Conference (ISWC), 2006.
- 12- Tummarello, G., Morbidoni, C., Petersson, J., Piazza, F., Puliti, P., RDFGrowth, a P2P annotation exchange algorithm for scalable semantic web applications, (2004) CEUR Workshop Proceedings, 108, MobiQuitous 2004 Workshop on Peer-to-Peer Knowledge Management, P2PKM 2004, 2004

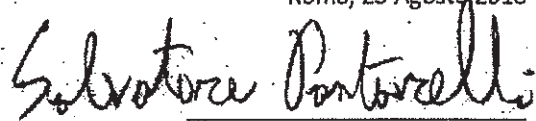
Data, 22/08/2018



## Elenco delle pubblicazioni e della tesi di dottorato

1. Tesi di Dottorato in Ingegneria Microelettronica e delle Telecomunicazioni XV-Ciclo, Università di Roma – Tor Vergata dal titolo "METODOLOGIE E TECNICHE PER LO SVILUPPO DI APPLICAZIONI AD ALTA AFFIDABILITÀ SU SISTEMI HARDWARE RICONFIGURABILI"
2. Michael Mitzenmacher, Pedro Reviriego, and Salvatore Pontarelli. "OMASS: One Memory Access Set Separation." IEEE Transactions on Knowledge and Data Engineering 28, no. 7 (2016): 1940-1943.
3. Pontarelli S, Reviriego P, Maestro JA, "Improving counting Bloom filter performance with fingerprints". INFORMATION PROCESSING LETTERS.
4. Pontarelli S, Reviriego P, Maestro JA (2016). Parallel d-Pipeline: A Cuckoo Hashing Implementation for Increased Throughput. IEEE TRANSACTIONS ON COMPUTERS.
5. Pontarelli S, Reviriego P, Ottavi M, Maestro JA (2015). Low delay single symbol error correction codes based on reed solomon codes. IEEE TRANSACTIONS ON COMPUTERS.
6. Pontarelli S, Reviriego P, Mitzenmacher M (2014). Improving the performance of Invertible Bloom Lookup Tables. INFORMATION PROCESSING LETTERS.
7. Pontarelli S, Reviriego P, Maestro JA (2014). Efficient flow sampling with back-annotated Cuckoo hashing. IEEE COMMUNICATIONS LETTERS
8. Pontarelli S, Bianchi G, Teofili S (2013). Traffic-aware Design of a High Speed FPGA Network Intrusion Detection System. IEEE TRANSACTIONS ON COMPUTERS, vol. 62, no. 11, pp. 2322-2334, 2013.
9. Pontarelli S, Reviriego P, Bleakley C, Maestro J (2013). Low Complexity Concurrent Error Detection for Complex Multiplication. IEEE TRANSACTIONS ON COMPUTERS, vol. 62, no. 9, p. 1899-1903.
10. Reviriego P, Pontarelli S, Maestro J, Ottavi M (2013). A method to construct low delay single error correction codes for protecting data bits only. IEEE TRANSACTIONS ON COMPUTER-AIDED DESIGN OF INTEGRATED CIRCUITS AND SYSTEMS, vol. 32, p. 479-483.
11. Pontarelli S, Ottavi M (2013). Error detection and correction in content addressable memories by using bloom filters. IEEE TRANSACTIONS ON COMPUTERS, Vol. 62, no. 6, pp. 1111-1126, 2013.
12. Reviriego P, Pontarelli S, Evans A, Maestro JA, "A Class of SEC-DED-DAEC codes derived from Orthogonal Latin Square Codes", IEEE Transaction on VLSI systems, vol. 23, no. 5, pp. 968-972, 2015.
13. Reviriego, P., Pontarelli, S. and Maestro, J.A., 2013. Concurrent error detection for orthogonal Latin squares encoders and syndrome computation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 21(12), pp. 2334-2338.

Roma, 23 Agosto 2018

  
Salvatore Pontarelli



**DICHIARAZIONI SOSTITUTIVE DI CERTIFICAZIONI**  
(art. 46 D.P.R. n.445/2000)  
**DICHIARAZIONI SOSTITUTIVE DELL'ATTO DI NOTORIETA'**  
(art. 19 e 47 D.P.R. n.445/2000)

La sottoscritta

**TOMMASI TATIANA,**

**DICHIARA:**

Di essere autore della tesi di dottorato "Learning to Learn by Exploiting Prior Knowledge" nonché delle 12 pubblicazioni nella seguente tabella e che le copie fornite sono conformi all'originale

N	Title	Authors	Publication Details
1	From source to target and back: Symmetric Bi-Directional Adaptive GAN	P. Russo, F. M. Carlucci, <b>T. Tommasi</b> , B. Caputo	IEEE International Conference on Computer Vision and Pattern Recognition, <b>CVPR 2018 (A+)</b> <a href="http://cvpr2018.thecvf.com/program/main_conference">http://cvpr2018.thecvf.com/program/main_conference</a> (paper 2781) [num. of cit. 9, source Google Scholar]
2	Training Deep Networks without Learning Rates Through Coin Betting	F. Orabona, <b>T. Tommasi</b>	Advances in Neural Information Processing Systems, <b>NIPS 2017 (A++)</b> pre-proceedings available online <a href="https://papers.nips.cc/book/advances-in-neural-information-processing-systems-30-2017">https://papers.nips.cc/book/advances-in-neural-information-processing-systems-30-2017</a> [num. of cit. 3, source Google Scholar]
3	Active Transfer Learning with Zero-Shot Priors: Reusing Past Datasets for Future Tasks	E. Gavves, T. Mensink, <b>T. Tommasi</b> , C. G. M. Snoek, T. Tuytelaars	IEEE International Conference on Computer Vision, <b>ICCV 2015 (A++)</b> DOI: 10.1109/ICCV.2015.313 [num. of cit. 26, source Google Scholar; 11 source Scopus]
4	Combining Multiple Cues for Visual Madlibs Question Answering	<b>T. Tommasi</b> , A. Mallya, B. Plummer, S. Lazebnik, A. Berg, T. Berg	<b>International Journal of Computer Vision, IJCV 2018 (IF:11.541)</b> DOI: 10.1007/s11263-018-1096-0
5	What Would They Say? Predicting User's Comments in Pinterest	J. C. Gomez, <b>T. Tommasi</b> , S. Zoghbi and M. F. Moens	IEEE Latin America Transactions, <b>LAT 2016 (IF:0.631)</b> DOI: 10.1109/TLA.2016.7483548 [num. of cit. 3, source Google Scholar; 1 source Scopus]
6	Joint cross-domain classification and subspace learning for unsupervised adaptation	B. Fernando, <b>T. Tommasi</b> , T. Tuytelaars	Pattern Recognition Letters, <b>PRL 2015 (IF:1.586)</b> DOI: 10.1016/j.patrec.2015.07.009 [num. of cit. 23, source Google Scholar; 18 source Scopus]
7	Location recognition over large time lags	B. Fernando, <b>T. Tommasi</b> , T. Tuytelaars	Computer Vision and Image Understanding, <b>CVIU 2015 (IF:2.134)</b> DOI:10.1016/j.cviu.2015.05.016 [num. of cit. 6, source Google Scholar; 3 source Scopus]
8	Learning Categories From Few Examples With Multi Model Knowledge Transfer	<b>T. Tommasi</b> , F. Orabona, B. Caputo	IEEE Transactions on Pattern Analysis and Machine Intelligence, <b>T-PAMI 2014 (IF:5.781)</b> DOI: 10.1109/TPAMI.2013.197 [num. of cit. 67, source Google Scholar; 38 source Scopus]
9	Improving Control of Dexterous Hand Prostheses Using Adaptive Learning	<b>T. Tommasi</b> , F. Orabona, C. Castellini, B. Caputo	IEEE Transactions on Robotics, <b>T-RO 2013 (IF:2.649)</b> DOI: 10.1109/TRO.2012.2226386 [num. of cit. 49, source Google Scholar; 31 source Scopus]
10	Using Object Affordances to Improve Object Recognition	C. Claudio, <b>T. Tommasi</b> , N. Noceti, F. Odone, B. Caputo	IEEE Transactions on Autonomous Mental Development, <b>T-AMD 2011 (IF:2.310)</b> DOI: 10.1109/TAMD.2011.2106782 [num. of cit. 51, source Google Scholar; 34 source Scopus]
11	Learning Methods for Melanoma Recognition	E. La Torre, B. Caputo, <b>T. Tommasi</b>	International Journal of Imaging Systems and Technology, <b>IJIST 2010 (IF: 0.684)</b> DOI: 10.1002/ima.20261 [num. of cit. 17, source Google Scholar; 9 source Scopus]
12	Discriminative Cue Integration for Medical Image Annotation	<b>T. Tommasi</b> , F. Orabona, B. Caputo	Pattern Recognition Letters, <b>PRL 2008 (IF:1.559)</b> DOI: 10.1016/j.patrec.2008.03.009 [num. of cit. 93, source Google Scholar; 56 source Scopus]

Roma, 21/8/2018

il dichiarante

*Tatiana Tommasi*





# Elenco pubblicazioni selezionate da sottoporre a valutazione<sup>1</sup>

Doctoral Thesis:

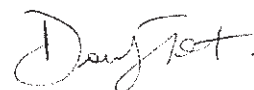
- (0) Daniele Toti. Model and Domain Independence: an Experience in Model Management and Information Extraction. (Daniele Toti - Ph.D. Thesis.pdf)

Peer-reviewed Journal Papers:

- (1) Nicola Capuano, Daniele Toti (CA). Experimentation of a smart learning system for law based on knowledge discovery and cognitive computing. In *Computers in Human Behavior* (in press), DOI: 10.1016/j.chb.2018.03.034 (2018\_eJRM\_CHB.pdf)
- (2) Daniele Toti, Viet Hung Le, Valentina Tortosa, Valentina Brandi, Fabio Polticelli. LIBRA-WA: a web application for ligand binding site detection and protein function recognition. In *Bioinformatics*, Vol. 34, No. 5, 2018, DOI: 10.1093/bioinformatics/btx715 (2018\_LIBRAWA\_Bioinformatics.pdf)
- (3) Giuseppe D'Aniello, Matteo Gaeta, Francesca Loia, Marek Reformat, Daniele Toti (CA). An Environment for Collective Perception based on Fuzzy and Semantic Approaches. In *Journal of Artificial Intelligence and Soft Computing Research*, Vol. 8, No. 3, 2018, DOI: 10.1515/jaiscr-2018-0013 (2018\_FCM\_JAISCR.pdf)
- (4) Daniele Toti, Gabriele Macari, Fabio Polticelli. Protein-ligand binding site detection as an alternative route to molecular docking and drug repurposing. In *Bio-Algorithms and Med-Systems*, Vol. 14, No. 2, 2018, DOI: 10.1515/bams-2018-0004 (2018\_LIBRAWA\_BAMS.pdf)
- (5) Daniele Toti (CA), Andrea Longhi. SEMANTO: a graphical ontology management system for knowledge discovery. In *Journal of Ambient Intelligence and Humanized Computing*, Vol. 9, No. 4, 2018, DOI: 10.1007/s12652-017-0518-0 (2018\_eJRM\_SEMANTO\_AIHC.pdf)
- (6) Daniele Toti (CA), Marco Rinelli. RAN-Map: a system for automatically producing API layers from RDF schemas. In *Journal of Ambient Intelligence and Humanized Computing*, Vol. 8, No. 2, 2017, DOI: 10.1007/s12652-016-0394-z (2017\_RAN-Map\_AIHC.pdf)
- (7) Elena di Muzio, Daniele Toti (JFA), Fabio Polticelli. DockingApp: a user friendly interface for facilitated docking simulations with AutoDock Vina. In *Journal of Computer-Aided Molecular Design*, Vol. 31, No. 2, 2017, DOI: 10.1007/s10822-016-0006-1 (2017\_DockingApp\_JCAMD.pdf)
- (8) Le Viet Hung, Silvia Caprari, Massimiliano Bizai, Daniele Toti, Fabio Polticelli. LIBRA: Ligand Binding site Recognition Application. In *Bioinformatics*, Vol. 31, No. 24, 2015, DOI: 10.1093/bioinformatics/btv489 (2015\_LIBRA\_Bioinformatics.pdf)
- (9) Nicola Capuano, Andrea Longhi, Saverio Salerno, Daniele Toti. Ontology-driven Generation of Training Paths in the Legal Domain. In *IJET, Special Issue ALICE 2014*, Vol. 10, No. 7, 2015, DOI: 10.3991/ijet.v10i7.4609 (2015\_eJRM-ALICE-IJET.pdf)
- (10) Silvia Caprari, Daniele Toti (JFA), Le Viet Hung, Maurizio Di Stefano, Fabio Polticelli. ASSIST: a fast versatile local structural comparison tool. In *Bioinformatics*, Vol. 30, No. 7, 2014, DOI: 10.1093/bioinformatics/btt664 (2014\_ASSIST\_Bioinformatics.pdf)
- (11) Angelo Gaeta, Matteo Gaeta, Paolo Piciocchi, Pierluigi Ritrovato, Daniele Toti, Agostino Vollero. Evaluation of the human resources relevance in organisations via knowledge technologies and semantic social network analysis. In *International Journal of Knowledge and Learning*, Vol. 9, No. 3, 2014, DOI: 10.1504/IJKL.2014.068918 (2014\_Relevance\_Analysis\_IJKL.pdf)
- (12) Daniele Toti, Paolo Atzeni, Fabio Polticelli. Automatic Protein Abbreviations Discovery and Resolution from Full-Text Scientific Papers: The PRAISED Framework. In *Bio-Algorithms and Med-Systems (BAMS)*, Vol. 8, No. 1, 2012, DOI: 10.2478/bams-2012-0002 (2012\_PRAISED\_BAMS.pdf)

per un totale di 12 pubblicazioni selezionate (esclusa Tesi di Dottorato).

Roma, 06/08/2018



<sup>1</sup> CA = Corresponding Author, JFA = Joint First Author

## Informazioni personali

Nome e Cognome **Antonio di Noia**  
Indirizzo  
Telefono  
E-mail  
PEC  
Cittadinanza  
Luogo e Data di nascita

## Istruzione e formazione

Titolo della qualifica rilasciata **Dottorato di ricerca in Ingegneria dell'Informazione e della Comunicazione**  
Corso di dottorato di ricerca – anno accademico 2011/2012 – 27° CICLO.

Data 20 Maggio 2016

Principali tematiche/competenze professionali possedute

Tesi di ricerca dal titolo: *"Predizione del rischio di malattie lavoro-correlate attraverso analisi di clustering e ottimizzazione genetica"*. Relatore supervisore: Prof. Antonello Rizzi.  
Tecniche di intelligenza computazionale, cluster analysis, ottimizzazione genetica, knowledge discovery e data mining. Tecniche Object Oriented Analysis, Design e Programming - linguaggio di programmazione utilizzato C++, Visual C++  
Lo scopo ed obiettivo della ricerca ha riguardato uno studio particolareggiato nell'ambito della salute e sicurezza sul lavoro in riferimento alle malattie professionali (ma anche agli infortuni sul lavoro con relativo danno biologico), al fine di:

- progettare e realizzare un'applicazione software come strumento innovativo di interesse medico-sanitario, attraverso lo sviluppo di prototipi di sistemi automatici di classificazione, basati sulle tecniche dell'intelligenza computazionale attraverso lo studio ed analisi di combinazioni di Cluster Analysis e di un Algoritmo Genetico in grado di interfacciarsi con il database delle malattie occupazionali di livello nazionale.
- Sperimentare l'impiego dei sistemi sviluppati su dati reali del settore delle malattie lavoro-correlate ai fini predittivi del rilevamento precoce e della prevenzione (supporto alla diagnostica clinica).

Il progetto è stato inquadrato in una collaborazione con l'Area Ricerca dell'Istituto Nazionale per l'Assicurazione contro gli Infortuni sul Lavoro (ex ISPESL) – INAIL nell'ambito della linea di ricerca P31L04: *"Progettazione e sperimentazione di sistemi intelligenti applicati alla prevenzione sul lavoro"*.

Nome e tipo d'organizzazione erogatrice dell'istruzione e formazione

Dipartimento di Ingegneria dell'Informazione, Elettronica e Telecomunicazioni - Facoltà di Ingegneria dell'Informazione, Informatica e Statistica - Università degli Studi di Roma "Sapienza"

Titolo della qualifica rilasciata

**Laurea in Scienze dell'Informazione – voto 105/110** (ante riforma DM 509/99 - equiparata a Laurea in Informatica DM 01/03/2000 e succ. DM 09/07/2009)

Data

20 Giugno 1997

Principali tematiche/competenze professionali possedute

Tesi sperimentale della durata di un anno dal titolo: *"Rapida prototipazione di architetture di calcolatori con tecniche orientate agli oggetti"*.  
Lavoro realizzato con tecniche Object Oriented Analysis, Design e Programming - linguaggio di programmazione utilizzato C++.  
Analisi, progettazione e sviluppo di software e banche dati.  
Gestione progetti.

Nome e tipo d'organizzazione erogatrice dell'istruzione e formazione

Università degli Studi di Bari

Titolo della qualifica rilasciata

**Diploma di Perito industriale in Telecomunicazioni**

Nome e tipo d'organizzazione erogatrice dell'istruzione e formazione

Istituto Tecnico Industriale Statale "Sen. O. Jannuzzi" di Andria (Ba)

## Esperienza professionale

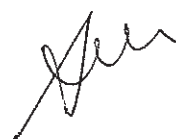
Data	31 gennaio 2013 ad oggi
Lavoro o posizione ricoperti	<b>Funzionario Informatico</b> , Area terza, fascia retributiva F3, nel ruolo Agricoltura del Ministero delle Politiche Agricole, Alimentari e Forestali (Mipaaf) con contratto a tempo pieno e indeterminato CCNL comparto Ministeri, presso la Direzione generale degli affari generali, delle risorse umane e per i rapporti con le regioni e gli enti territoriali AGRET II – SIAN (Sistema Informativo Agricolo Nazionale), coordinamento ICT e informazione; conferito in seguito alla soppressione dell'Ente ASSI ai sensi dell'art. 23 quater, commi 3 e 9, del DL 6 luglio 2012, n. 95, convertito in legge, con modificazioni, dalla legge 7 agosto 2012 n. 135 e successiva adozione del Decreto Interministeriale del 31/01/2013 di trasferimento delle risorse dall'Assi al Mipaaf.
Principali attività e responsabilità	Gestione e coordinamento delle attività di sviluppo di applicazioni web/client server per il SIAN (Sistema Informativo Agricolo Nazionale), lungo tutto il ciclo di vita del software con utilizzo di metodologie object oriented. Attività di gestione per i "Servizi di Cooperazione Applicativa" in web services per l'accesso e l'interscambio delle informazioni per la tenuta dei registri elettronici di carico e scarico di alcune sostanze alimentari tra le ditte interessate e le banche dati del Ministero.
Nome e indirizzo del datore di lavoro	Ministero delle politiche agricole, alimentari e forestali – Via XX settembre 20 - Roma
Tipo di attività o settore	Amministrazione Pubblica comparto Ministeri
Data	29 giugno 2010 - 30 gennaio 2013
Lavoro o posizione ricoperti	<b>Specialista in analisi di flussi informativi e procedure informatiche</b> , contratto a tempo indeterminato nell'area C, posizione economica C3, CCNL enti pubblici non economici; quale vincitore del concorso pubblico per la copertura di 10 posti nell'area C, posizione C3, (di cui 2 posti con laurea in informatica e esperienza per flussi informativi e procedure informatiche), pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 25 del 31 marzo 2006.
Principali attività e responsabilità	Redazione di studi di fattibilità, raccolta dei requisiti, analisi di flussi informativi e procedure informatiche web e client/server, analisi e personalizzazione di piattaforme open source (PHP) per la gestione e il monitoraggio di risorse aziendali con utilizzo di metodologie object oriented.
Nome e indirizzo del datore di lavoro	Agenzia per lo Sviluppo del Settore Ippico (ASSI) (ex UNIRE) – Roma
Tipo di attività o settore	Amministrazione Pubblica – Ente Pubblico non economico
Data	15 gennaio 2009 - 28 giugno 2010
Lavoro o posizione ricoperti	<b>Incarico di ricerca con laurea in informatica</b> , conferito dal 15/01/2009 al 14/02/2010 e prorogato fino al 31/12/2010, quale vincitore del concorso per titoli e colloquio per 3 incarichi di ricerca di cui 1 con laurea in informatica. Avviso pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 70 del 9 settembre 2008.
Principali attività e responsabilità	Realizzazione del progetto CCM "Il sistema di sorveglianza delle patologie correlate al lavoro attraverso le segnalazioni dirette ai Dipartimenti di Prevenzione delle ASL, utilizzando il modello MALPROF per l'analisi e lo studio del fenomeno". Titolo della ricerca: «Progettazione ed implementazione degli strumenti informatici per la registrazione delle patologie correlate al lavoro da inserire nel database nazionale dell'ISPESL.». In data 28/01/2010, incarico per la gestione dei contenuti dell'Area Statistiche del sito web dell'ISPESL e per la realizzazione della sezione Sorveglianza infortuni mortali.
Nome e indirizzo del datore di lavoro	ISPESL Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro (area ricerca INAIL)
Tipo di attività o settore	Ente Pubblico di Ricerca

Data	01 Gennaio 2008 - 31 Dicembre 2008
Lavoro o posizione ricoperti	<b>Incarico di ricerca con laurea in informatica</b> conferito in merito al rinnovo del precedente incarico (26/03/2007 - 31/12/2007) per la prosecuzione della linea di ricerca del Piano triennale 2005-2007, per l'anno 2008.
Principali attività e responsabilità	Linea di ricerca: Strumenti per l'alimentazione delle banche dati e la diffusione via Internet del patrimonio informativo. Raccolta dei requisiti, analisi, progettazione, testing e gestione dell'implementazione delle applicazioni con metodologia iterativa (modello a spirale) per la definizione di soluzioni architetturali Microsoft.NET con modellazione UML (Unified Modeling Language). Deployment, versioning, testing e monitoraggio dell'applicazione MaProWeb (C#) e amministrazione delle utenze finali, nonché amministrazione della relativa base dati SQL Server 2000. Docenze nell'ambito di corsi di formazione destinati ai servizi di Prevenzione delle ASL inerenti l'uso degli applicativi realizzati per l'inserimento delle segnalazioni di malattie professionali (MaProWeb) e degli infortuni mortali (Sistema di sorveglianza degli Infortuni Mortali).
Nome e indirizzo del datore di lavoro	ISPESL Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro (area ricerca INAIL)
Tipo di attività o settore	Ente Pubblico di Ricerca
Data	26 Marzo 2007 - 31 Dicembre 2007
Lavoro o posizione ricoperti	<b>Incarico di ricerca con laurea in informatica</b> a seguito del provvedimento del 23 marzo 2007 deliberante il rinnovo del conferimento del precedente incarico di durata annuale (20/03/2006 - 19/03/2007) con laurea in informatica per il prosieguo dell'attività.
Principali attività e responsabilità	Realizzazione di una applicazione web oriented (C#) con accesso protetto per l'aggiornamento della banca dati nazionale (SQL Server) riguardo alle malattie professionali denominata MaProWeb. La realizzazione dell'applicazione viene eseguita tenendo conto della protezione dei dati sensibili nel rispetto della legge sulla privacy. Riprogettazione dell'applicazione web per la sorveglianza degli infortuni mortali per l'adeguamento alla nuova scheda di rilevazione dei casi. In data 16/05/2007, inserimento nel gruppo di lavoro per il progetto "Il sistema di sorveglianza delle patologie correlate al lavoro attraverso le segnalazioni dirette ai Dipartimenti di Prevenzione delle ASL, utilizzando il modello MALPROF per l'analisi e lo studio del fenomeno"
Nome e indirizzo del datore di lavoro	ISPESL Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro (area ricerca INAIL)
Tipo di attività o settore	Ente Pubblico di Ricerca
Data	20 Marzo 2006 - 19 Marzo 2007
Lavoro o posizione ricoperti	<b>Incarico di ricerca con laurea in informatica</b> quale vincitore del concorso per titoli e colloquio per 16 incarichi di ricerca di cui 1 con laurea in informatica per la realizzazione del Piano di Attività 2004, pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 23 del 22 marzo 2005.
Principali attività e responsabilità	Realizzazione di un'applicazione web-oriented (C#) per l'accesso, interattivo e "protetto", alla banca dati "Anagrafe nazionale dei luoghi di lavoro", frutto dell'integrazione dei seguenti archivi: registro ditte delle Camere di Commercio, archivio aziende dell'INPS, Censimento Generale dell'Industria, del Commercio, dei Servizi e dell'Artigianato curato dall'ISTAT.
Nome e indirizzo del datore di lavoro	ISPESL Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro (area ricerca INAIL)
Tipo di attività o settore	Ente Pubblico di Ricerca






Data	17 Ottobre 2005 - 27 Aprile 2006
Lavoro o posizione ricoperti	Collaborazione con un contratto a progetto in qualità di <b>Software Engineer Object Oriented</b> .
Principali attività e responsabilità	Docenze nell'ambito di corsi di formazione destinati a sviluppatori software inerenti la programmazione ad oggetti con riferimento ad un particolare linguaggio (Java, C++, C#) e inerenti l'utilizzo degli strumenti e ambienti di sviluppo per il software. Reverse engineering e manutenzione di applicativi aziendali client/server e applicazioni web per scopi adattativi ed evolutivi. Analisi, progettazione e implementazione O.O. con utilizzo di modellazione UML.
Nome e indirizzo del datore di lavoro	Didactica Global Solutions S.p.a. società di Servizi Informatici con sede a Napoli e Roma
Tipo di attività o settore	Produzione di software, consulenza informatica e attività connesse Corsi di formazione in informatica.
Data	01 Luglio 2005 - 10 Ottobre 2005
Lavoro o posizione ricoperti	Impiegato con un contratto a tempo indeterminato 5° livello categoria Metalmeccanico in qualità di <b>Software Engineer Object Oriented e come Quality Assurance Assistant</b> .
Principali attività e responsabilità	Presso la Direzione Centrale Information Communication Technology divisione Sistemi Informativi di <i>Poste Italiane Spa</i> , ho collaborato alla stesura e definizione delle linee guida per il ciclo di vita del software, alla realizzazione del configuration management per un progetto di data warehouse nonché alla stesura di documentazione tecnica e per il Quality Assurance. Analisi, progettazione banche dati e di strumenti per la gestione delle configurazioni per lo sviluppo SW. Consulenza sviluppo SW e supporto tecnico al marketing. Analisi e redazione documentale
Nome e indirizzo del datore di lavoro	2T Informatica S.r.l. società di Servizi Informatici con sede in Roma.
Tipo di attività o settore	Produzione di software, consulenza informatica e attività connesse
Data	4 Maggio 2005 - 30 Giugno 2005
Lavoro o posizione ricoperti	Impiegato con un contratto a tempo indeterminato 5° livello categoria Metalmeccanico in qualità di <b>Software Engineer Object Oriented e come Quality Assurance Assistant</b> .
Principali attività e responsabilità	Presso la Direzione Centrale Information Communication Technology divisione Sistemi Informativi di <i>Poste Italiane Spa</i> , ho collaborato alla stesura e definizione delle linee guida per il ciclo di vita del software, alla redazione di documentazione per software selection e ho fornito supporto al Project Manager per la stesura di documentazione tecnica e per il Quality Assurance. Consulenza sviluppo SW e supporto tecnico al marketing.
Nome e indirizzo del datore di lavoro	2i Iniziative Informatiche S.r.l. società di Servizi Informatici con sede in Roma.
Tipo di attività o settore	Produzione di software, consulenza informatica e attività connesse
Data	01 Marzo 2005 - 29 Aprile 2005
Lavoro o posizione ricoperti	Impiegato con un contratto a tempo indeterminato 2° livello categoria Commercio in qualità di <b>Software Engineer Object Oriented</b> .
Principali attività e responsabilità	Per EDS per conto di Consip evoluzione di funzionalità per il portale di Consip per la gestione di servizi per l'amministrazione Consip e i fornitori della stessa. (Java) Analisi, sviluppo SW e redazione documentale.
Nome e indirizzo del datore di lavoro	Level 3 S.r.l. gruppo STM Italia Spa società di Servizi Informatici con sede in Roma.
Tipo di attività o settore	Produzione di software, consulenza informatica e attività connesse.






Data	14 Ottobre 2000 - 30 Novembre 2004
Lavoro o posizione ricoperti	Impiegato con un contratto a tempo indeterminato 1° livello categoria Commercio in qualità di <b>Software Engineer Object Oriented</b> .
Principali attività e responsabilità	1) Presso <i>GFI OIS</i> per conto del <i>Ministero delle Attività Produttive</i> (ex Ministero Commercio Estero) raccolta dei requisiti, analisi, progettazione (UML) e implementazione di un'Applicazione Web - Internet/Intranet (Java) per il rilascio di titoli di import/export dei prodotti agricoli mediante interoperabilità tra le Amministrazioni coinvolte (Ministero Attività Produttive e Agenzia delle dogane) e gli operatori commerciali con implementazione di Web Services e Firma Elettronica. Realizzazione di interoperabilità con l'applicativo di gestione dei titoli presso il Ministero, progettazione della relativa base dati Sybase. 2) Per conto di <i>Siemens Informatica</i> e <i>Telecom Italia</i> , progettazione della Staging Area per il Data Warehouse e dell'Operational Data Store (ODS) Oracle 9.x della intranet Telecom. 3) Presso <i>Siemens Informatica</i> per conto del <i>Ministero dell'Interno</i> , analisi, progettazione (UML) e realizzazione del software (Visual C++) necessario all'emissione delle nuove carte d'identità e per la gestione delle liste dei servizi nazionali sia per la parte ministeriale che per quella periferica dei Comuni per il progetto Carta d'Identità Elettronica con progettazione della relativa base dati.
Nome e indirizzo del datore di lavoro	Finsa Tech S.r.l. società di Servizi Informatici con sede in Roma facente parte del gruppo FINSA con sede a Genova.
Tipo di attività o settore	Produzione di software, consulenza informatica e attività connesse.
Data	24 Gennaio 2000 - 13 Ottobre 2000
Lavoro o posizione ricoperti	Impiegato con un contratto a tempo indeterminato 7° livello settore metalmeccanico in qualità di <b>Software Engineer Object Oriented</b> .
Principali attività e responsabilità	1) Realizzazione di un prototipo Web - Client/Server per usi bancari. (Java) 2) Per conto di <i>Wind Telecomunicazioni</i> realizzazione di un Information Bus (Java e C++) che consentisse lo scambio di informazioni tra i vari sistemi dell'architettura Wind utilizzando la piattaforma applicativa TIBCO.
Nome e indirizzo del datore di lavoro	SI2SI S.p.A. società di Servizi Informatici con sede in Roma.
Tipo di attività o settore	Produzione di software, consulenza informatica e attività connesse.
Data	14 Settembre 1998 - 23 Gennaio 2000
Lavoro o posizione ricoperti	Impiegato con un contratto a tempo indeterminato 2° livello del settore commercio in qualità di <b>Software Engineer Object Oriented</b> .
Principali attività e responsabilità	Per conto di <i>Telesoft S.p.A.</i> e <i>Telecom Italia</i> realizzazione di un'applicazione Client/Server (C++) sviluppata riguardante la gestione grafica degli instradamenti telefonici e delle interconnessioni tra i nodi Telecom Italia e gli altri Operatori telefonici. Progettazione e sviluppo SW
Nome e indirizzo del datore di lavoro	Pride S.p.A. società di Informatica e Telecomunicazioni con sede in Roma.
Tipo di attività o settore	Produzione di software, consulenza informatica e attività connesse.
Data	16 Marzo 1998 - 13 Settembre 1998
Lavoro o posizione ricoperti	Impiegato con un contratto a tempo indeterminato 5° livello settore commercio terziario in qualità di <b>Programmatore Object Oriented</b> .
Principali attività e responsabilità	Per conto di <i>Enti Pubblici (ASL e Comuni)</i> realizzazione di un'applicazione Web (Java) per la gestione documentale via Web con relativa progettazione della base dati Oracle 7.2.x, disegno della base dati e attività di reengineering. Progettazione e sviluppo SW
Nome e indirizzo del datore di lavoro	Operae S.r.l. con sede in Parma.
Tipo di attività o settore	Produzione di software, consulenza informatica e attività connesse.

## Docenze

- **Università Sapienza di Roma** - Facoltà di Medicina e Odontoiatria – Scienze Chirurgiche  
Corso di laurea: Infermieristica (abilitante alla professione sanitaria di Infermiere) ROMA – corso di laurea A - Azienda Policlinico Umberto I - L/SNT1  
Corso Integrato/Insegnamento: Infermieristica basata sulle prove di efficacia.  
**Modulo insegnamento: INFORMATICA – INF/01**  
Anno Accademico: 2017/2018 – II semestre
- **Università Sapienza di Roma** - Facoltà di Medicina e Odontoiatria – Neurologia e Psichiatria  
Corso di laurea: Tecniche di neurofisiopatologia (abilitante alla professione sanitaria di Tecnico di neurofisiopatologia) - Azienda Policlinico Umberto I - L/SNT3  
Corso Integrato/Insegnamento: Principi di elettronica e strumentazione biomedica.  
**Modulo insegnamento: SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI – INF-ING/05**  
Anno Accademico: 2017/2018 – II semestre

Le suddette docenze sono state svolte come docente a contratto

- **Corsi di Formazione con Crediti ECM, per Medici del Lavoro e Assistenti sanitari per la gestione del sistema informativo sulle Malattie Professionali (MAL.PROF.) – 10 edizioni:**
  - Senigallia (AN) - 24 e 25 febbraio 2010 - Aula didattica del Presidio Ospedaliero di Senigallia
  - Roma – 17 e 18 febbraio 2010 - Sede ISPEL, Via Alessandria 220/E
  - Genova - 12 e 13 novembre 2009 - Sede della Regione Liguria - Pal. WTC, Via De Marini 1
  - Roma – 10 e 11 giugno 2009 - Sede ISPEL, Via Alessandria 220/E
  - Udine - 26 e 27 maggio 2009 - Sede della Regione Friuli Venezia Giulia di Udine
  - Bari – 10 e 11 marzo 2009 - Sede Centro Universus
  - Roma – 20 e 21 gennaio 2009 - Sede ISPEL, Via Alessandria 220/E
  - Roma – 10 e 11 dicembre 2008 - Sede ISPEL, Via Alessandria 220/E
  - Roma – 24 e 25 novembre 2008 - Sede ISPEL, Via Alessandria 220/E
  - Roma – 11 e 12 novembre 2008 - Sede ISPEL, Via Alessandria 220/E
- **Corsi di Formazione per la gestione del sistema informativo sulle Malattie Professionali (MAL.PROF.) – 2 edizioni:**
  - Napoli – 1 e 2 ottobre 2008 - Sede Regione Campania - ARSAN, Assessorato alla Sanità AGC – Centro Direzionale ISOLA C3.
  - Roma – 20 maggio 2008 - Sede ISPEL – Dipartimento Processi Organizzativi, Via Urbana 167
- **Corso di programmazione in Visual Basic .NET 2008 della durata complessiva di 48 ore**
  - Roma – aprile - novembre 2009 - Sede Istituto Meschini S.r.l., Via Piave 74.

Le suddette docenze sono state svolte nell'ambito dell'incarico di ricerca presso l'ex ISPEL dal 01/04/2008 al 28/06/2010

## Corsi, seminari e Stage

- Seminario: "Data Analytics in MATLAB" - via Virgilio 1 E/F/G, NH Hotel Giustiniano - Roma, 24 marzo 2015. (Dottorato)
- Seminario: "Analisi di flussi informativi sui rischi e gli infortuni lavorativi per lo sviluppo di strumenti ed azioni finalizzati al miglioramento delle condizioni di lavoro" - Largo 5 giornate, INAIL - Roma, 6 giugno 2013. (Dottorato)
- Seminario: "Evoluzione delle reti nella prossima decade" - Roberto Saracco - Aula 25, Dipartimento di Ingegneria dell'Informazione, Elettronica e Telecomunicazioni - Università degli Studi di Roma "Sapienza", Via Eudossiana, 18 - Roma, 30 maggio 2013. (Dottorato)
- Seminario: "Author Workshop" - Springer - Aula Magna, Dipartimento di Ingegneria Informatica, Automatica e Gestionale (DIAG) - Università degli Studi di Roma "Sapienza", Via Ariosto, 25 - Roma, 18 febbraio 2013. (Dottorato)
- Convegno nazionale: "Il Sistema MalProf e le reti di rilevazione delle malattie professionali" - Auditorium INAIL, Piazzale Giulio Pastore, 6 - Roma, 9 novembre 2012. (Dottorato)
- Corso universitario: "Biologia Computazionale" - Dipartimento di Informatica - Università "Sapienza" Roma - 1 marzo 2012 - 8 giugno 2012 (Dottorato)
- Corso di formazione "Enterprise Guide - query & reporting" - SAS Institute - Roma - 7 - 8 ottobre 2009. (IspeSI)
- Corso di formazione "Business Intelligence reporting" - SAS Institute Roma - 5 - 6 ottobre 2009. (IspeSI)
- Corso di formazione training on the job, progetto "Banche Dati Interattive" tenuto da SAS Institute presso IspeSI - Roma - 02 ottobre 2009. (IspeSI)
- Corso di formazione "Gli strumenti SAS di Business Intelligence" - SAS Institute - Roma - 01 ottobre 2009. (IspeSI)
- Corso di formazione "Fondamenti di SAS 2: linguaggio di programmazione" - SAS Institute - Roma - 20, 21, 22 luglio 2009. (IspeSI)
- Corso di formazione "Fondamenti di SAS 1: accesso, trattamento dati e reporting" - SAS Institute - Roma - 8, 9, 10 luglio 2009. (IspeSI)
- Corso: "Advanced Web Applications development using MS ASP.NET" - Digital Institute - Roma - 3 giorni - 30/07/2007 - 01/08/2007. (IspeSI)
- Corso: "Sviluppare applicazioni web con Visual Studio.NET" - Digital Institute - Roma - 5 giorni - 23/05/2007 - 25/05/2007 e 31/05/2007 - 01/06/2007. (IspeSI)
- Corso: "Programmare con ADO.NET" - Digital Institute - Roma - 3 giorni - 11/09/2006 - 13/09/2006. (IspeSI)
- Corso: "Programming with the MS.NET Framework (MS Visual C#.NET)" - Digital Institute - Roma - 4 giorni - 29/08/2006 - 01/09/2006. (IspeSI)
- Corso: "Analyzing Requirements and Defining MS.NET Solution Architectures" - Digital Institute - Roma - 5 giorni - 24/07/2006 - 28/07/2006. (IspeSI)

- Corso: "Lingua Inglese" livello iniziale A2 (livello base) livello finale B1 (livello autonomia) - Training Club S.r.l - Roma - 19/06/2006 - 27/03/2007. (Ispesl)
- Formazione on the job: "SUN ONE Web Technologies: SUN ONE Portal Server 6.2, SUN ONE Identity Server 6.1 e SUN ONE Web Server 6.1" con particolare riferimento al caso di gestione di utenti di un portale utilizzando funzioni di Web Services ed API Java di Identity Server con deploy finale della Web Application - SUN Microsystems Italia - Roma - 1 mese - Novembre 2003. (Finsa Tech S.r.l.)
- Corso aziendale: "Sybase Adaptive Server Enterprise 12.0 e Enterprise Application Server Jaguar CTS 4.2" - GFI OIS S.p.A. - Roma - 1 settimana - Aprile 2002. (Finsa Tech S.r.l.)
- Corso aziendale: "TIBCO: messagistica tra applicazioni in rete" - Wind Telecomunicazioni - Roma - 2 settimane - 06/03/2000 - 17/03/2000. (SI2SI S.p.A.)
- Corso aziendale: "Ilog Views 2.1, Ilog Inform 3.0: sviluppo di applicazioni grafiche per uso geografico" - Telesoft - Napoli - 2 settimane - Settembre 1998. (Phda S.p.A.)
- Corso aziendale: "Oracle Web Server" - Operae S.r.l. - Parma - 1 settimana - Aprile 1998. (Operae S.r.l.)
- Stage: formazione Java con utilizzo di JDK e JBuilder per la realizzazione di applicazioni Client/Server ed Applet. DB utilizzati: InterBase ed Access. Presso TecnoMultimediale S.r.l. società di Servizi e Consulenza informatica - Roma - 1 mese - Febbraio 1998
- Stage: formazione su Oracle Developer e Designer/2000 su architettura Client/Server in ambienti operativi Windows NT/95 con riferimento ad un caso reale riguardante la gestione degli incassi di una Camera di Commercio. - presso Cartesio S.r.l. Società di Servizi e Consulenza informatica della filiale di Bari con sede in Perugia - Bari - Agosto - Settembre 1997

Madrelingua  
Altra(e) lingua(e)  
Autovalutazione  
Livello europeo (\*)

Italiano  
Inglese

Comprensione				Parlato				Scritto	
Ascolto		Lettura		Interazione orale		Produzione orale			
B1	Livello intermedio	C1	Livello avanzato	A2	Livello elementare	A2	Livello elementare	B1	Livello intermedio

(\*) Quadro comune europeo di riferimento per le lingue

#### Conferenze e workshop

Relatore

- ECTA in JCCI 2014 - 6th International Conference on Evolutionary Computation Theory and Applications part of 6th International Joint Conference on Computational Intelligence - "Occupational Diseases Risk Prediction by Cluster Analysis and Genetic Optimization" - Roma - 22-24 Ottobre 2014. (Dottorato)
- Seminario: "Illustrazione operativa dell'applicativo MaProWeb progettato e sviluppato dall'ISPESL per il sistema di registrazione delle malattie professionali circa gli ultimi aggiornamenti" - Centro Regionale Infortuni Malattie Professionali (CeRIMP) della regione Toscana - Viale Michelangelo, 41 c/o Presidio Piero Palagi - Firenze 13 marzo 2009. (Ispesl)
- Seminario: "Presentazione del software MaProWeb progettato e sviluppato dall'ISPESL per il sistema di registrazione delle malattie professionali" - Esposizione - Centro Regionale Infortuni Malattie Professionali (CeRIMP) della regione Toscana - Viale Michelangelo, 41 c/o Presidio Piero Palagi - Firenze 3 luglio 2008. (Ispesl)

Uditore

- Convegno Nazionale: "Il Sistema di sorveglianza MALPROF: Il fenomeno delle malattie professionali attraverso le rilevazioni dei Servizi di prevenzione" - Auditorium INAIL - Piazzale Giulio Pastore, 6 - Roma 25 novembre 2010. (Dottorato)
- Convegno Nazionale: "Il Sistema di sorveglianza degli infortuni mortali sul lavoro" - ISPESL - Auditorium via Rieti Meeting e Convegni - via Rieti 11/13 - Roma 2 dicembre 2009. (Ispesl)
- Workshop: "Sviluppi possibili del Sistema di Sorveglianza degli infortuni mortali e gravi" - a cura del Dipartimento Processi Organizzativi dell'ISPESL - sede della Regione Toscana - via Parigi, 11 - Roma 18 marzo 2009. (Ispesl)

## Pubblicazioni

1. Giugno 2016: Tesi di Dottorato XXVII Ciclo  
Antonio di Noia  
Tutor: Prof. Antonello Rizzi  
"Predizione del rischio di malattie lavoro-correlate attraverso analisi di clustering e ottimizzazione genetica"  
Sapienza Università di Roma  
Url: [iris.uniroma1.it](http://iris.uniroma1.it) (ex Padis)  
Handle: <http://hdl.handle.net/11573/876068>
2. Gennaio 2016: Capitolo di libro  
A. di Noia, P. Montanari and A. Rizzi  
"Occupational Diseases Risk Prediction by Genetic Optimization: Towards a Non-exclusive Classification Approach"  
Book: Computational Intelligence  
Series: Studies in Computational Intelligence  
Chapter No.: 5, Page: 63/77  
Springer International Publishing Switzerland 2016 - J.J. Merelo et al. (eds.),  
DOI 10.1007/978-3-319-26393-9\_5  
Book ID: 322506\_1\_En  
Book ISBN: 978-3-319-26391-5  
(Dottorato)
3. Ottobre 2014: Pubblicazione a conferenza.  
Di Noia A., Montanari P., Rizzi A.  
"Occupational Diseases Risk Prediction by Cluster Analysis and Genetic Optimization"  
In Proceedings of the International Conference on Evolutionary Computation Theory and Applications (ECTA-2014, Rome) part of International Joint Conference on Computational Intelligence (IJCCI), pp 68-75  
Copyright 2014 SCITEPRESS (Science and Technology Publications, Lda.)  
DOI: 10.5220/0005077800680075  
ISBN: 978-989-758-052-9  
(Dottorato)
4. Dicembre 2011: Giuseppe Campo, Maria Grazia Magliocchi, Antonio di Noia, Paolo Montanari, Adriano Papale - "Quinto rapporto INAIL-Regioni sulle malattie professionali - MALPROF 2007-2008" - INAIL - Dipartimento Processi Organizzativi - ex ISPESL - U.F. Comunicazione - Redazione - Milano Dicembre 2011.  
(Versione elettronica: [https://appsricercascientifica.inail.it/statistiche/index\\_mp.asp?p=dati](https://appsricercascientifica.inail.it/statistiche/index_mp.asp?p=dati) sotto la voce Quinto Rapporto Malprof (anni 2007 - 2008) link [Consulta monografico](#)).  
ISBN 978-88-7484-202-5  
(Ispesl)
5. Giugno 2009: Giuseppe Campo, Maria Grazia Magliocchi, Paolo Montanari, Antonio di Noia, Adriano Papale - "Quarto rapporto ISPESL-Regioni sulle malattie professionali - MALPROF 2005-2006" - ISPESL, Dipartimento Processi Organizzativi, Roma - supplemento alla rivista "Prevenzione Oggi" - Giugno 2009.  
(Versione elettronica: [https://appsricercascientifica.inail.it/statistiche/index\\_mp.asp?p=dati](https://appsricercascientifica.inail.it/statistiche/index_mp.asp?p=dati) sotto la voce Quarto Rapporto Malprof (anni 2005 - 2006) link [Consulta monografico](#)).  
(Ispesl)
6. Luglio 2008: Paolo Montanari, Antonio di Noia, Simona Mineo - "Il software per l'inserimento degli eventi (Versione 2.0)", manuale utente del software per l'inserimento degli eventi per il sistema nazionale di sorveglianza degli infortuni mortali sul lavoro (per la conoscenza e lo studio delle dinamiche infortunistiche finalizzati alla prevenzione) - ISPESL, Dipartimento Processi Organizzativi - Luglio 2008.  
(Versione elettronica: <https://appsricercascientifica.inail.it/im/indexSofw.asp> sotto la voce Strumenti di lavoro - Manuale utente del software link [Consulta](#)).  
(Ispesl)
7. Luglio 2008: Paolo Montanari, Antonio di Noia - analisi, progettazione e gestione dell' "Applicazione OLTP (On Line Transaction Processing) web-based per l'inserimento dei casi di infortuni mortali e gravi"  
Dipartimento Processi Organizzativi - sito internet dell'ex ISPESL (area ricerca INAIL).







8. Luglio 2008: Paolo Montanari, Antonio di Noia, Alessandro Silvetti, Simona Mineo - *"MaProWeb – Applicativo web based per l'inserimento delle segnalazioni di malattie professionali raccolte dai servizi di prevenzione dell'ASL (Versione 1.1)"*, manuale utente del software - ISPESL, Dipartimento Processi Organizzativi - Luglio 2008.  
(Versione elettronica [https://appsricercascientifica.inail.it/statistiche/index\\_mp.asp?p=sw](https://appsricercascientifica.inail.it/statistiche/index_mp.asp?p=sw) sotto la voce Manuale utente del software link Manuale utente (File scaricabile PDF))  
(Ispesl)
9. Luglio 2008: Paolo Montanari, Alessandro Silvetti, Antonio di Noia - *analisi, progettazione e gestione dell' "Applicazione OLTP (On Line Transaction Processing) web-based MaproWeb (per l'inserimento delle segnalazioni di malattie professionali raccolte dai servizi di prevenzione delle ASL)"*.  
Dipartimento Processi Organizzativi - sito internet dell'ex ISPESL (area ricerca INAIL).  
(Ispesl)
10. Luglio – Settembre 2008: G. Campo, M.G. Magliocchi, G. Capozza, A. Papale, P. Montanari, A. di Noia - *"Il sistema di sorveglianza MalProf per le patologie correlate al lavoro"* - Articolo in Giornale Italiano di Medicina del Lavoro ed Ergonomia (GIMLE), Vol. XXX, Supplemento 2 al N. 3 - Luglio-Settembre 2008 (pp 105-106).  
(Ispesl)
11. Giugno 2008: G. Campo, A. di Noia, M. G. Magliocchi, P. Montanari, A. Papale - *"Il Sistema di sorveglianza MALPROF delle patologie correlate al lavoro, basato sulle segnalazioni dirette ai Dipartimenti di Prevenzione delle ASL"* – ISPESL - Poster al convegno: "Il Ccm per la prevenzione" ospitato alla quinta edizione del SANIT, forum internazionale della salute, presso il Palazzo dei Congressi dell'Eur - Roma 23 - 26 giugno 2008.  
url: [http://www.ccm-network.it/documenti/Ccm/convegni/SANIT/materiali2008/poster/48P-Malprof\\_Ispesl\\_Campo.pdf](http://www.ccm-network.it/documenti/Ccm/convegni/SANIT/materiali2008/poster/48P-Malprof_Ispesl_Campo.pdf)  
(Ispesl)

Marzo 2018 sottomissione alla procedura di accettazione e valutazione della Springer per possibile pubblicazione in uno dei seguenti journals:

- Data Mining and Knowledge Discovery;
- Pattern Analysis and Applications;
- Soft Computing;

Dell'articolo:

*"Occupational Diseases Risk Prediction by Support Vector Machines and Genetic Optimisation"*  
Antonio di Noia, Alessio Martino, Paolo Montanari and Antonello Rizzi



# Vincite ed idoneità di pubblici concorsi

Idoneità:	Procedura pubblica di selezione per la copertura di complessivi tre posti di ricercatore universitario a tempo determinato, ai sensi dell'Art.24 C.3, Lett. A) della legge 240/2010, presso l'Università degli Studi di Roma Tre, per lo svolgimento di attività di ricerca, di didattica, di didattica integrativa e di servizio agli studenti, con contratto di lavoro di diritto privato di durata triennale, a tempo pieno/definito, presso il Dipartimento di Ingegneria, (1 posto), per il Settore Concorsuale 09/G2 Bioingegneria, Settore Scientifico Disciplinare ING-INF/06 Biongegneria Elettronica e Informatica. Ambito di ricerca e relative attività: "Elettromiografia di superficie per l'analisi del movimento umano. Neuromeccanica della coordinazione muscolare."
Conseguita presso:	Avviso di selezione pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 16 del 28 febbraio 2017.
Data di conseguimento:	Dipartimento di Ingegneria - Università degli Studi di Roma Tre. 20/06/2017
Idoneità:	Selezione pubblica, per titoli ed esame-colloquio, di complessivi 5 posti per il profilo professionale di collaboratore tecnico di VI livello CCNL EPR, con contratto a tempo determinato di un anno, di cui 1 con profilo di collaboratore tecnico per il supporto nella gestione di dati complessi presso l'ISPR - Istituto Superiore per la Protezione e la Ricerca Ambientale.
Conseguita presso:	Avviso di selezione pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 62 del 05 agosto 2011.
Data di conseguimento:	ISPR - Istituto Superiore per la Protezione e la Ricerca Ambientale. 03/11/2011
Vincita:	Selezione pubblica, per titoli e colloquio, per il conferimento di 42 incarichi di ricerca a laureati e diplomati con esperienza acquisita presso enti pubblici di ricerca per la realizzazione delle attività previste dal piano triennale 2008-2010 presso il Dipartimento Processi Organizzativi (DPO) dell'ISPESL di cui 1 incarico con laurea in informatica (Codice settore DPO4) della durata di 12 mesi rinnovabili.
Conseguita presso:	Programma P02 - Aggiornamento e sviluppo degli strumenti per l'acquisizione e il trasferimento delle conoscenze in materia di sicurezza e salute negli ambienti di vita e di lavoro.
Data di conseguimento:	Linea L02: Progettazione e aggiornamento degli strumenti web accessibili via Internet per l'acquisizione delle informazioni alimentanti le banche dati in materia di sicurezza e salute negli ambienti di vita e di lavoro.
Posizione finale:	Concorso pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 9 del 2 febbraio 2010. Istituto Superiore per la Prevenzione E la Sicurezza del Lavoro (ex ISPESL). 21/06/2010 Prima.
Idoneità:	Selezione pubblica, per titoli e prova-colloquio, di complessive 117 unità di personale, per l'assunzione con contratto a tempo determinato di durata annuale, di cui 2 con profilo di Tecnologo - III livello presso l'Istituto Superiore di Sanità (profilo H del bando).
Conseguita presso:	Avviso di selezione pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 64 del 16 agosto 2008.
Data di conseguimento:	Istituto Superiore di Sanità. 28/01/2009.

Vincita :	Concorso selezione, per titoli e colloquio per il conferimento di tre incarichi di ricerca di cui 1 incarico di ricerca con laurea in informatica per l'espletamento delle attività di ricerca, previste dall'accordo di collaborazione con il Ministero della Salute per il progetto "Il sistema di sorveglianza delle patologie correlate al lavoro attraverso segnalazioni dirette ai Dipartimenti di Prevenzione delle ASL utilizzando il modello MALPROF per l'analisi e lo studio del fenomeno".
Conseguita presso :	Oggetto della prestazione (codice settore A1): progettazione ed implementazione degli strumenti informatici per la registrazione delle patologie correlate al lavoro da inserire nel database nazionale dell'ISPESL.
Data di conseguimento :	Concorso pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 65 del 17 agosto 2007.
Posizione finale :	Istituto Superiore per la Prevenzione E la Sicurezza del Lavoro (ISPESL).
Idoneità :	16/11/2007
Conseguita presso :	Prima
Data di conseguimento :	Concorso pubblico per esami per la copertura di 7 posti nell'area «C», posizione economica C2, profilo professionale di esperto informatico, per le esigenze del Ministero della Giustizia Dipartimento dell'Amministrazione Penitenziaria, pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 30 del 16 aprile 2004.
Posizione finale :	Ministero della Giustizia Dipartimento dell'Amministrazione Penitenziaria.
Idoneità :	15/11/2005.
Conseguita presso :	Quindicesima
Data di conseguimento :	Concorso pubblico per esami a n. 1 posto di Categoria D, posizione economica D1, area tecnica, tecnico-scientifica ed elaborazione dati per le esigenze del Centro di Servizi Didattico ed in particolare per lo sviluppo di servizi della rete di Ateneo (cod. rif. 04/09), pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana - 4ª serie speciale «Concorsi ed esami» - n. 45 dell'8 giugno 2004
Posizione finale :	Università degli Studi Federico II di Napoli
	02/12/2004
	Quinta.

www.Albopretorio.it




- **Analysis & Design Tools**

StarUML, Rational Rose C++ Analyzer, Rational SoDA for Word, Data Modeler di Rational Rose Enterprise, Rational Rose – Rose Enterprise, Oracle Designer, MagicDraw UML, Together.

- **Developer Tools**

JBuilder Enterprise, Visual Studio .NET, Homesite, Microsoft Visual Studio for Visual C++, TIBCO (API C++), AppBuilder Oracle for Java, Oracle Procedure Builder di Developer, Forte for Java – Community Edition, VisualAge for Java, Oracle Jdev.

- **Management & Configuration e altri Tools**

Microsoft Visual Source Safe, CVS, All Fusion Harvest Workbench di CA, Oracle Schema Manager, Reflection X, MS OFFICE e Microsoft Project.

- **Linguaggi**

Java J2SE, J2EE (Servlet, JSP, Applet e JavaBeans), MS.NET C#, ASP.NET, XML, HTML, PHP, JavaScript, C++, Visual C++ - MFC, SQL, PL/SQL, Delphi, Fortran, Assembler, UML.

- **Metodologie di sviluppo delle applicazioni**

Orientata agli oggetti, Modellazione classica.

- **Web Server**

Tomcat, Sybase Jaguar CTS, SUN ONE Web Server, Internet Information Services (IIS).

- **Application Server**

Enterprise Application Server Jaguar CTS di Sybase, Oracle Application Server.

- **Data Base e Data Warehouse**

Oracle, RDBMS Sybase Adaptive Server Enterprise, SQL Server 2000, SAS System per Windows.

- **Altre Tecnologie**

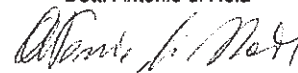
Cifratura con chiavi pubbliche e private, firma elettronica, SOAP, WebServices

Ai sensi degli artt. 46 e 47 del D.P.R. 28 dicembre 2000, n. 445, il sottoscritto, consapevole delle responsabilità penali in cui può incorrere in caso di dichiarazioni mendaci secondo quanto prescritto dall'art. 76 del D.P.R. 445/2000, dichiara che tutte le eventuali copie allegate al presente Curriculum sono conformi agli originali, ed inoltre, che tutti gli stati, fatti e qualità personali ivi indicati corrispondono al vero.

Autorizzo il trattamento dei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali" e del GDPR (Regolamento UE 2016/679).

Roma 23/08/2018

Dott. Antonio di Noia



# FABIO GALASSO

## Curriculum Vitae

### Part I – General Information

### Part II – Education

- 10 / 2005 – 3 / 2011 **University of Cambridge, UK**  
PhD in engineering  
Image processing and computer vision  
Research: shape-from-texture, spectral distortion analysis, 3-D reconstruction
- 9 / 1998 – 5 / 2004 **Roma Tre University, Italy**  
Laurea in electrical engineering (Laurea quinquennale, VO)  
Signal processing for telecommunications  
110/110 cum laude
- 9 / 1993 – 7 / 1998 **Liceo Scientifico "S. Cannizzaro", Italy**  
Diploma (secondary school)  
60/60





## Part III – Appointments

### III A – Academic appointments

- 10 / 2011 – 8 / 2014 **Max Planck Institute for Informatics, Germany**  
Post-doctoral researcher  
Research: computer vision, video analysis and segmentation  
Advisor: Prof. Bernt Schiele
- 4 / 2009 – 3 / 2011 **University of Cambridge, UK**  
Doctoral researcher  
Principal co-investigator of research for the Panasonic Corporation  
Research: computer vision, video analysis, clustering, people detection  
Advisor: Prof. Roberto Cipolla
- 4 / 2011 – 8 / 2011 **University of Cambridge, UK**  
Post-doctoral researcher  
Principal co-investigator of research for the Panasonic Corporation  
Research: computer vision, video analysis, clustering, people detection  
Advisor: Prof. Roberto Cipolla

### III B – Industry appointments

- Since 9 / 2014 **OSRAM, Germany**  
Head of the Computer Vision Department, corporate R&D
- R&D for smart lighting, roadmap and strategic planning
  - Project and department lead, cost-center management
  - Supervision of staff scientists, post-docs and PhD students
- Achievements
- Attraction of ~2.8 million EUR public funding from EU and German gov.
  - Team growth from 0 to 12 staff members (+8 students)
  - Creation of IT computational server infrastructure
  - Prototype, transfer and update of camera-based sensor
- 12 / 2004 – 8 / 2005 **Telecom Italia, Italy**  
Senior assistant to specialist activities  
Responsibility: integration of technology solutions on the Telecom portal
- 9 / 2003 – 5 / 2004 **Ericsson, Italy**  
Intern, MA thesis preparation  
R&D: generalized processor sharing for systems with heavy-tailed inputs



### III C – Consultancy experience

- 1 / 2014 – 6 / 2014 **Prime Minister Office, Technology Division, Italy**  
Software: 3D scene representation and reconstruction for investigations
- 5 / 2013 – 10/2013 **BMW Motorcycles, Germany**  
Software (proposal stage): fault detection in the breaking disk production
- 1 / 2012 – 5 / 2012 **Reply S.p.A. (Italy)**  
Software: fast image retrieval from large image databases

### Part IV – Teaching experience

#### IV A – Courses at universities

- 1 / 2011 – 8 / 2014 Teaching assistant of the course "High Level Computer Vision"  
University of Saarland
- 3 / 2011 – 8 / 2014 Guest lecturer at the course "High Level Computer Vision"  
University of Saarland
- 9 / 2009 – 3 / 2011 Guest lecturer at the course "Computer Vision"  
University of Cambridge
- 9 / 2006 – 3 / 2008 Teaching assistant at the Signal and Image Processing course  
University of Cambridge

*Note: since I was granted scholarship, I had my own research funds (PhD scholarship, industrial Panasonic Post-doc grant). The lectures above were offered willingly.*

#### IV B – Masters' student supervision

- 9 / 2014 – 03/2015 Co-supervisor of a Master's Student (Zornitsa Kostadinova) at the Max Planck Institute for Informatics on "efficient image segmentation"
- 1 / 2014 – 06/2014 Co-supervisor of a Master's Student (Anna Khoreva) at the Max Planck Institute for Informatics on "video segmentation"
- 9 / 2013 – 12/2013 Co-supervisor of a Master's Student (Rahim Kadkhoda Mohammadi) at the Max Planck Institute for Informatics on "joint pose estimation and segmentation"



#### IV C – PhD student supervision

- 10/2016 – 09/2017 Co-supervisor of a PhD student (Ramireddy Devaram) at the University of Catania on “fall and activity detection and recognition”
- Since 11 / 2015 Co-supervisor of a PhD student (Irtiza Hasan) across the University of Verona and OSRAM on “activity recognition and forecast”
- Since 11 / 2015 Co-supervisor of a PhD student (Theodoros Tsesselis) across OSRAM, the University of Verona and the Istituto Italiano di Tecnologia IIT on “lit scene understanding”

#### Part V - Society memberships, Awards and Honors

##### V A – Awards and Honors

- 2017 1<sup>st</sup> place in the DETRAC car detection competition at AVSS'17
- 2014 Outstanding Reviewer at CVPR (Awarded to 50 out of 1000)
- 2014 Outstanding Reviewer at ECCV (Awarded to 50 out of 1000)
- 2005 “A Luisa Aldobrandini” PhD scholarship  
Awarded yearly by St. John's College for the duration of the PhD studies
- 1999 – 2003 Best student in electrical engineering at RomaTre University  
Awarded yearly to 5 out of 100 students
- 1997 17<sup>th</sup> place in Italian national mathematical games  
2000 students took part in the finals from all Italian high schools

##### V B –Workshop organization and participation in school committee

- 2018 Co-organizer of the International Workshop on Video Segmentation (IWVS'18); in conj. with the European Conference on Computer Vision (ECCV)
- 2016 Co-organizer of the International Workshop on Video Segmentation (IWVS'16); in conj. with the European Conference on Computer Vision (ECCV)
- 2014 Co-organizer of the International Workshop on Video Segmentation (IWVS'14); in conj. with the European Conference on Computer Vision (ECCV)
- Since 2013 Member of committee at Int. Computer Vision Summer School (ICVSS)



## V C – Conference area chairing

2017	Area Chair at ICCV International Conference ( <u>ICCV</u> )
2017	Area Chair at AVSS International Conference ( <u>AVSS</u> )
2019	Area Chair at VISAPP International Conference ( <u>VISAPP</u> )
2017	Area Chair at VISAPP International Conference ( <u>VISAPP</u> )
2015	Area Chair at VISAPP International Conference ( <u>VISAPP</u> )

## V D – Participations in program committee and reviewing

2015	Reviewer for Neurocomputing ( <u>NEUCOM</u> )
2014	Reviewer for IEEE Transactions on Pattern Analysis and Machine Intelligence ( <u>TPAMI</u> )
2014	Program committee member of IEEE Conf. on Computer Vision and Pattern Recognition ( <u>CVPR</u> )
2014	Program committee member of European Conference on Computer Vision ( <u>ECCV</u> )
2013	Program committee member of International Conference on Computer Vision ( <u>ICCV</u> )
2013	Reviewer for IEEE Transactions On Circuits And Systems For Video Technology 2013
2011	Reviewer for Pattern Recognition ( <u>PR</u> )

## Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Since 2018	<b>Principal Co-Investigator</b> of the PhD Grant by the European Institute of Innovation and Technology ( <u>EIT</u> ) (Duration 3 years)
Since 2016	<b>Principal Co-Investigator</b> of the German-funded (BMW) project named MECsense (Duration 3 years, acceptance rate 10%)
Since 2016	<b>Principal Co-Investigator</b> of the German-funded (BMBF) project named I2EASE (Duration 3 years, acceptance rate 10%)
Since 2015	<b>Principal Investigator and Coordinator</b> of the EU Marie Skłodowska-Curie ITN-EID project named SceneUnderLight Best score among all submissions in 2015, selected for press coverage (Duration 4 years, acceptance rate 2.5%)
10/2014 – 9/2017	<b>Principal Co-Investigator</b> of the German-funded (BMBF) project named InnoSYS (Duration 3 years, acceptance rate 10%)
10/2015 – 12/2016	<b>Principal Co-Investigator</b> of the German-funded (BMBF) project named LiONS (acceptance rate 10%)



## Part VII – Research Activities

- Video segmentation** How the pixels from a video sequence are grouped to highlight objects and scene elements. For example, given an on-board-camera street view from a driving car, this corresponds to segmenting the people, cars, bicycles as well as traffic lights, pavements, road and buildings from the video.
- I have worked on various aspects of video segmentation, including learning features and graphs from the appearance and motion cues and providing novel theory for the clustering of pixels [cf. my previous work: Khoreva et al. ECCV'16, = CVPR'15, = GCPR'14; Galasso et al. CVPR'14, = ICCV'13, = ACCV'12]
- In future research, grouping pixels (within the frames and over time) would improve the recognition of objects, allow feedback reasoning on which evidence from the video supports a recognized object, and enable the understanding of complex scenes.
- Research In this field includes challenges such as representing the video (esp. time) and developing theory and models to learn from it, as well as maintaining the computation viable, from a time and memory perspective [cf. my previous work: Galasso et al. CVPR'14].
- Research in this area involves the creation of benchmarks to foster progress [cf. my previous work: Galasso et al. ICCV'13].
- Video co-segmentation** Similarly to video segmentation, video co-segmentation targets grouping pixels from videos based on their semantics. However video co-segmentation assumes that supervision be provided as large video datasets and that objects and semantic scene parts be segmented based on their co-occurrences across the videos (similar appearance and/or motion), thus without an explicit (expensive) per-pixel annotation [cf. my previous work: Chiu et al. ACCV'16]
- This line of research addresses a crucial need of modern computer vision and machine learning, i.e. learning with less supervision, out of sample images and videos, provided with minimal or without annotations.
- Clustering** This is a most general machine learning problem, whereby elements from a data set are grouped, in the attempt to find a structure in the data. Clustering lies at the foundation of segmentation. In image and video segmentation the pixels are naturally structured into frames (images) over time.
- Modern approaches to clustering seek for globally optimal solutions when dealing with "Tera"-quantities of data. Previous research of mine [Galasso et al. CVPR'14, Khoreva et al. GCPR'14] has attempted to gradually group the data locally, proceeding via most certain groupings (must-link constraints), while defining the conditions for global optimality. Future research should further reduce computational complexity.





Inference and  
learning in time

In the deep learning era, a number of computer vision and machine learning tasks have matured, such as detection, recognition and segmentation of objects. But all of them mostly apply to static images just.

Inference in videos would naturally boost detection and recognition, and reconnect those to 3D reconstruction problems. Learning from videos would implicitly demand more data but may come with future research strategies for using the video organization, such as tracking object over time.

I have addressed in previous research: the propagation of labelled frames over time to reduce the video annotation time [Badrinarayanan et al. *CVPR'10*]; learning from videos for the spatio-temporal clustering of pixels from people [Galasso et al. *ICCV'11*]; and the propagation of segmentation solutions over time, i.e. online/streaming video segmentation [Galasso et al. *CVPR'14*].

Research on the topics would foster progress on activity recognition.

Object detection and  
recognition

Object detection and recognition is currently the most mature piece of research from the computer vision and machine learning fields, which has reached industry-level accuracy. Together with the Computer Vision Team at OSRAM we have modelled task-specific prior information to transfer research into innovation. Sample work includes top-view people detection [Demirkus et al. *VISAPP'17*] and surveillance-view car detection [Amin and Galasso *AVSS'17*], winner of the best detector award at the *DETRAC challenge*.

Gaze estimation,  
people tracking and  
forecast

Human pose estimation stands for identifying the gestures of people and their gaze, also known as view frustum of attention. People arguably look at areas that they are interested in, but also pathways that they would take in the future. For this reason gaze estimation encodes the people attention and may aid the people tracking and their trajectory forecast [cf. my previous work: Hasan et al. *CVPR'18*, - *ICIP'17*, - *WACV'18*].

Light and Photometry

Computer vision and machine learning get close to computer graphics in this field, thanks to maturing discriminative techniques and their applications to BRDF, as well as the research on non-negative matrix factorization and its application to light decomposition [cf. my previous work: Tsesmelis et al. *ICCV'17*, - *ICIAP'17*].

Efficient Inference  
and model  
compression

The application of deep neural network models in industrial application and embedded devices is hindered by the large computational requirements, esp. runtime and memory. In the Computer Vision Team at OSRAM, we have addressed both aspects, designing a new network compression framework for transferring knowledge from a large model (*teacher*) to a slim and fast one (*student*) [Belagiannis et al. *ECCV'18*].

Note: the conference citations above are linked to their pdf's.



## Part VIII – Summary of Scientific Achievements

Peer-reviewed international conferences:	22 (Google scholar), 20 (Scopus) from 2007 to 2018
All international conferences:	24 (Google scholar), 18 (Scopus) from 2007 to 2018
Patents:	8 from 2010 to 2016
Total Impact factor (2008-2017)*	57.3 (Google scholar), 43.3 (Scopus)

Average Impact factor (2008-2017)\* 5.7 (Google scholar), 4.3 (Scopus)

\* The impact factors for each year are computed as the ratio between the citations of articles in the previous two years and the number of the articles in those two years. The total impact factor is the sum of all impact factors over the years since the first publication year 2007 (thus in the range 2008-2017).

According to Google scholar the yearly impact factors are 0.5 in 2008, 1 in 2009, 0 in 2010, 1.667 in 2011, 2.667 in 2012, 5.5 in 2013, 15 in 2014, 10.75 in 2015, 15.5 in 2016, 4.667 in 2017; thus summing to 57.251.

According to Scopus the yearly impact factors are 0 in 2008, 1 in 2009, 0 in 2010, 2.5 in 2011, 2.5 in 2012, 5 in 2013, 8.5 in 2014, 12.75 in 2015, 6.75 in 2016, 3.333 in 2017; thus summing to 43.333.

Total Citations (2008-2018) 576 (Google scholar), 211 (Scopus)

Average Citations per Publication 24 (Google scholar), 10.6 (Scopus)

Hirsch (H) index 10 (Google scholar), 8 (Scopus)

I10 index\*\* 10 (Google scholar)

\*\* Number of publications with at least 10 citations

Seniority (incl. PhD years) 12

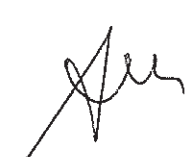
Normalized H index\*\*\* 0.833 (Google scholar), 0.667 (Scopus)

\*\*\* H index divided by the academic seniority

Note: in computer vision top-tier conferences have higher impact than journals. A H5-index-rank list, updated on July 2018, shows the following:

1. IEEE Conference on Computer Vision and Pattern Recognition, CVPR (H5-index=188)
2. IEEE International Conference on Computer Vision, ICCV (H5-index=124)
3. IEEE Transactions on Pattern Analysis and Machine Intelligence, TPAMI (H5-index=118)
4. European Conference on Computer Vision, ECCV (H5-index=104)
5. IEEE Transactions on Image Processing, TIP (H5-index=101)
6. Pattern Recognition, PR (H5-index=74)
7. International Journal of Computer Vision, IJCV (H5-index=65)

Source: [https://scholar.google.com/citations?view\\_op=top\\_venues&hl=en&vq=eng\\_computervisionpatternrecognition](https://scholar.google.com/citations?view_op=top_venues&hl=en&vq=eng_computervisionpatternrecognition)



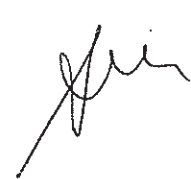
## Part IX – List of All Publications

### IX A – Peer-reviewed international conferences:

- 2018 Vasileios Belagiannis, Azade Farshad and Fabio Galasso  
**Adversarial Network Compression**  
In *Proc. Proc. European Conference on Computer Vision (ECCV) - CEFRL Workshop*  
Munich, Germany, September 2018 [\[link to pdf\]](#)
- 2018 I. Hasan, F. Setti, T. Tsesmelis, A. Del Bue, M. Cristani, F. Galasso  
**"Seeing is Believing": Pedestrian Trajectory Forecasting Using Visual Frustum of Attention**  
In *Proc. IEEE Winter Conf. on Applications of Computer Vision (WACV)*  
Lake Tahoe, USA, March 2018 [\[link to pdf\]](#) [\[link to presentation\]](#)  
(Acceptance rate 37%)
- 2018 I. Hasan, F. Setti, T. Tsesmelis, A. Del Bue, F. Galasso, M. Cristani  
**MX-LSTM: mixing tracklets and vislets to jointly forecast trajectories and head poses**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
Salt Lake City, USA, June 2018 [\[link to pdf\]](#)  
(spotlight oral presentation acceptance rate 6.6%)
- 2017 T. Tsesmelis, I. Hasan, M. Cristani, A. Del Bue, F. Galasso  
**LIT: a system and benchmark for light understanding**  
In *Proc. International Conference on Computer Vision (ICCV) Workshop on Color and Photometry in Computer Vision*  
Venice, Italy, October 2017 [\[link to pdf\]](#)
- 2017 I. Hasan, T. Tsesmelis, F. Galasso, A. Del Bue, M. Cristani  
**Tiny Head Pose Classification by Bodily Cues**  
In *Proc. IEEE International Conference on Image Processing (ICIP)*  
Beijing, China, September 2017 [\[link to pdf\]](#)  
(acceptance rate 45%)
- 2017 Sikandar Amin and Fabio Galasso  
**Geometric Proposals for Faster R-CNN**  
In *Proc. IEEE Int. Conf. on Adv. Video and Signal based Surveill. (AVSS) International Workshop on Traffic and Street Surveillance*  
**1<sup>st</sup> place in the DETRAC car detection competition**  
Lecce, Italy, August 2017 [\[link to pdf\]](#) [\[competition results\]](#)
- 2017 I. Hasan, T. Tsesmelis, A. Del Bue, F. Galasso, M. Cristani  
**Don't turn off the lights: Modelling of human light interaction in indoor environments**  
In *Proc. International Conference on Image Analysis and Processing (ICIAP) Workshop on Social Signal Processing and Beyond*  
Catania, Italy, September 2017 [\[link to pdf\]](#)
- 2017 M. Demirkus, L. Wang, M. Eschey, H. Kästle and F. Galasso  
**People Detection in Fish-eye Top-views**  
In *Proc. Int. Conference on Computer Vision Theory and Applications (VISAPP)*  
Porto, Portugal, February 2017 [\[link to pdf\]](#)



- 2016 Wei-Chen Chiu, Fabio Galasso and Mario Fritz  
**Towards Segmenting Consumer Stereo Videos: Benchmark, Baselines and Ensembles**  
In *Proc. Asian Conference on Computer Vision (ACCV)*  
Taipei, Taiwan, November 2016 [\[link to web\]](#)  
(acceptance rate 25%)
- 2016 Anna Khoreva, Rodrigo Benenson, Fabio Galasso, Matthias Hein and Bernt Schiele  
**Improved Image Boundaries for Better Video Segmentation**  
In *Proc. European Conference on Computer Vision (ECCV) - IWVS Workshop*  
Amsterdam, The Netherlands, October 2016 [\[link to web\]](#)
- 2015 Anna Khoreva, Fabio Galasso, Matthias Hein and Bernt Schiele  
**Classifier Based Graph Construction for Video Segmentation**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
Boston (MA), USA, June 2015 [\[link to pdf\]](#)  
(acceptance rate 28%)
- 2014 Fabio Galasso, Margret Keuper, Thomas Brox and Bernt Schiele  
**Spectral Graph Reduction for Efficient Image and Streaming Video Segmentation**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
Columbus, Ohio, June 2014 [\[link to pdf\]](#)  
(oral presentation acceptance rate 5.75%)
- 2014 Anna Khoreva, Fabio Galasso, Matthias Hein and Bernt Schiele  
**Learning Must-Link Constraints for Video Segmentation based on Spectral Clustering**  
In *Proc. German Conference on Pattern Recognition (GCPR)*  
Münster, Germany, September 2014 [\[link to pdf\]](#)  
(acceptance rate 40%)
- 2013 Fabio Galasso, Naveen Nagaraja, T. Cardenas, Thomas Brox and Bernt Schiele  
**A Unified Video Segmentation Benchmark: Annotation, Metrics and Analysis**  
In *Proc. International Conference on Computer Vision (ICCV)*  
Sydney, Australia, December 2013 [\[link to pdf\]](#)  
(acceptance rate 28%)
- 2012 Fabio Galasso, Roberto Cipolla and Bernt Schiele  
**Video Segmentation with Superpixels**  
In *Proc. Asian Conference on Computer Vision (ACCV)*  
Daejeon, Korea, November 2012 [\[link to pdf\]](#)  
(acceptance rate 26%)
- 2011 Fabio Galasso, Masahiro Iwasaki, Kunio Nobori and Roberto Cipolla  
**Spatio-Temporal Clustering of Probabilistic Region Trajectories**  
In *Proc. International Conference on Computer Vision (ICCV)*  
Barcelona, Spain, November 2011 [\[link to pdf\]](#)  
(acceptance rate 24%)



- 2010 Vijay Badrinarayanan, Fabio Galasso and Roberto Cipolla  
**Label Propagation in Video Sequences**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
San Francisco (CA), USA, June 2010 [\[link to pdf\]](#)  
(acceptance rate 27%)
- 2009 Fabio Galasso and Joan Lasenby  
**Fourier Analysis and Gabor Filtering for Texture Analysis and Local Reconstruction of General Shapes**  
In *Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*  
Miami (FL), USA, June 2009 [\[link to pdf\]](#)  
(acceptance rate 26%)
- 2008 Fabio Galasso and Joan Lasenby  
**Shape from Texture via Fourier analysis**  
In *Proc. International Symposium on Visual Computing (ISVC)*  
Las Vegas (NV), USA, November 2008
- 2007 Fabio Galasso and Joan Lasenby  
**Shape from Texture of Developable Surfaces via Fourier Analysis**  
In *Proc. International Symposium on Visual Computing (ISVC)*  
Lake Tahoe (NV/CA), USA, December 2007
- 2007 Fabio Galasso and Joan Lasenby  
**Shape from Texture: Fast Estimation of Planar Surface Orientation via Fourier Analysis**  
In *Proc. British Machine Vision Conference (BMVC)*  
University of Warwick, UK, September 2007

#### IX B – Other international conferences

- 2017 Yi Li, Fabio Galasso and Bernhard Siessegger  
**True Occupancy Detection: Smart Lighting and Deep Learning Revolution**  
In *Smart Lighting*  
Hamburg, Germany, May 2017
- 2016 Fabio Galasso and Bernhard Siessegger  
**True Occupancy Detection: Computer Vision meets Smart Lighting**  
In *Smart Lighting*  
Milan, Italy, May 2016
- 2015 Bernhard Siessegger and Fabio Galasso  
**Beyond Occupancy Detection, Smart Sensors the enablers of tomorrow's Lighting**  
In *Smart Sensing*  
Berlin, Germany, May 2015
- 2014 Thomas Brox, Fabio Galasso, Fuxin Li, James M. Rehg, Bernt Schiele  
**First International Workshop on Video Segmentation - Panel Discussion**  
In *Proc. European Conference on Computer Vision (ECCV)- IWVS Workshop*  
Zurich, Switzerland, September 2014 [\[link to pdf\]](#)





## IX C – Patents

- 2016 T. Tsesmelis, I. Hasan, M. Cristani, F. Galasso, A. Del Bue, M. Eschey, H. Kästle  
**A method of identifying light source, corresponding system and computer program product**  
WO/2018/069827A1, priority date October 13th, 2016
- 2016 I. Hasan, F. Setti, T. Tsesmelis, F. Galasso, A. Del Bue, M. Cristani, M. Eschey, H. Kästle  
**A method of view frustum detection, corresponding system and computer program product**  
WO/2018/069826A1, priority date October 13th, 2016
- 2016 H. Kästle, M. Demirkus, L. Wang, M. Eschey, F. Galasso  
**Presence detection at stationary objects**  
DE102016115414A1, priority date August 19th, 2016
- 2016 H. Kästle, M. Demirkus, L. Wang, M. Eschey, F. Galasso  
**Training method and detection method for object recognition**  
WO/2017/182225, priority date April 21st, 2016 [\[link to pdf\]](#)
- 2010 M. Iwasaki, K. Nobori, A. Komoto, F. Galasso and R. Cipolla  
**Method and Apparatus for Trajectory Estimation and Method for Segmentation**  
US 8948448 B2, priority date March 15th, 2010 [\[link to pdf\]](#)  
Additionally filed and granted as EP 2548174 B1, CN 102473307 B, JP 5404918 B2, WO 2011113444 A1

## IX D – PhD Thesis

- 2009 Fabio Galasso  
**Shape-From-Texture: Spectral Distortion Analysis and 3D Reconstruction Algorithms**  
PhD Thesis, Submitted on 15th July 2009 [\[link to pdf\]](#)

  
Dr. Fabio Galasso

Garching bei München, 4 August 2018



**INFORMAZIONI PERSONALI**

Cognome, Nome Gasparetti, Fabio

**ISTRUZIONE E FORMAZIONE**



- 2005 Dottorato di ricerca  
Dipartimento di Informatica e Automazione, Facoltà di Ingegneria - Università degli Studi Roma Tre  
Supervisore: Prof. Alessandro Micarelli  
Titolo rilasciato il 21 giugno 2005.
- 2001 Laurea (Vecchio Ordinamento)  
Facoltà di Ingegneria - Università degli Studi Roma Tre  
Titolo rilasciato il 28 settembre 2001.

**OCCUPAZIONE ATTUALE**

- 2016- Assegnista di Ricerca  
Dipartimento di Ingegneria - Università degli Studi Roma Tre  
Dal 1° giugno 2016.


**ABILITAZIONI**

- 2018-2024 Abilitazione Scientifica Nazionale come Professore di II fascia, Settore Concorsuale 09/H1 "Sistemi di Elaborazione delle Informazioni", Settore Scientifico-disciplinare ING-INF/05.  
Valida dal 30 marzo 2018 al 30 marzo 2024.



**ESPERIENZE PROFESSIONALI**

- 2011-2016 Ricercatore a Tempo Determinato L.230/2005 art.1 comma 14, Settore Concorsuale 09/H1 "Sistemi di Elaborazione delle Informazioni", Settore Scientifico-disciplinare ING-INF/05. Università degli Studi Roma Tre  
Dal 1 febbraio 2011 al 31 gennaio 2016.
- 2010-2011 Assegnista di Ricerca  
Dipartimento di Informatica e Automazione, Facoltà di Ingegneria - Università degli Studi Roma Tre.  
Dal 1 giugno 2010 al 31 gennaio 2011.
- 2008-2010 Assegnista di Ricerca  
Dipartimento di Informatica e Automazione, Facoltà di Ingegneria - Università degli Studi Roma Tre.  
Dal 1 febbraio 2008 al 31 gennaio 2010.
- 2006-2008 Assegnista di Ricerca  
Dipartimento di Informatica e Automazione, Facoltà di Ingegneria - Università degli Studi Roma Tre.  
Dal 1 febbraio 2006 al 31 gennaio 2008.



**ATTIVITA' DIDATTICHE E DI FORMAZIONE**

- 2018-2019 Conferimento dell'incarico di insegnamento "Fondamenti di Informatica ed Algebra Lineare" (9 CFU), Corso di Laurea di Ingegneria del Mare, Dipartimento di Ingegneria, Università degli Studi Roma Tre. A.A. 2018-2019.
- 2017-2018 Conferimento dell'incarico di supporto alla didattica per l'insegnamento "Machine Learning" (6 CFU) - Corso di Laurea Magistrale in Ingegneria Informatica, Dipartimento di Ingegneria, Università degli Studi Roma Tre. A.A. 2017-2018.
- 2017 Attribuzione di un incarico di insegnamento per un modulo didattico nell'ambito del "Corso di Dottorato in Informatica e Automazione" accreditato dal Ministero e attivato dal Dipartimento di Ingegneria della Università Roma Tre. Il modulo dal titolo "Machine Learning for Web Personalization" (A.A. 2017/18) è stato formalmente attribuito dal Collegio di Dottorato in data 27 giugno 2017, ed è stato tenuto nel novembre 2017. Corso aperto a tutti gli studenti di dottorato del Corso di Dottorato in Informatica e Automazione.
- 2014-2015 Incarico mediante affidamento dell'insegnamento: "Fondamenti di informatica" (6 CFU) Corso di Laurea in Ingegneria Informatica - Dipartimento di Ingegneria, Università degli Studi Roma Tre. A.A. 2014-2015.
- 2014 Incarico mediante affidamento dell'insegnamento: "Percorso di Matematica" Corso di Laurea in Ingegneria Informatica nell'ambito dei corsi di recupero OFA (Obblighi Formativi Aggiuntivi) - Dipartimento di Ingegneria, Università degli Studi Roma Tre. A.A. 2014-2015.
- 2013-2014 Incarico mediante affidamento dell'insegnamento: "Fondamenti di Informatica" (6 CFU) Corso di Laurea in Ingegneria Informatica - Facoltà di Ingegneria, Università degli Studi Roma Tre. A.A. 2013-2014. Valutazione attività didattica degli studenti per mezzo di questionari anonimi pari a 85.2% di soddisfatti.
- 2009-2010 Incarico di docenza a contratto per il corso "Fondamenti di Informatica" - Corso di Laurea in Ingegneria Elettronica - Facoltà di Ingegneria, Università degli Studi Roma Tre. A.A. 2009-2010.
- 2007- Supporto didattico alle attività di docenza per il corso "Sistemi Intelligenti per Internet" (6 CFU) - Corso di Laurea Magistrale in Ingegneria Informatica, Dipartimento di Ingegneria, Università degli Studi Roma Tre. Dal A.A. 2007-2008 fino al 2017-2018.
- 2007 Attività di formazione erogata dal candidato presso Italdata SpA nell'ambito dello Stage Master "Chief Knowledge Officer - CKO", finanziato dal progetto FAR "KEEN - Knowledge - based Extended ENTERprise" co-finanziato dal MIUR. Il modulo didattico formativo dal titolo "Information Filtering e User Modeling" (48 ore) è stato erogato dal 15 gennaio 2007 al 16 febbraio 2007.
- 2002-2003 Supporto didattico alle attività di docenza per il corso "Calcolatori Elettronici I e II", Corso di Laurea in Ingegneria Informatica, Facoltà di Ingegneria, Università degli Studi Roma Tre. A.A. 2002-2003.
- 2001- Correlatore di varie Tesi di laurea triennale e magistrale, Facoltà di Ingegneria, Dipartimento di Ingegneria - Università degli Studi Roma Tre. Dal A.A. 2001-2002.

**SUPERVISIONE DI STUDENTI DI DOTTORATO**

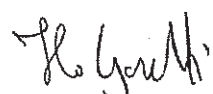
- 2013-2016 Supporto alle attività di supervisione per lo studente di dottorato del XXVIII ciclo  
Davide Feltoni Gurini  
Dipartimento di Ingegneria - Università degli Studi Roma Tre



## PARTECIPAZIONE A COMITATI DI PROGRAMMA SCIENTIFICI

Selezione di conferenze di rilevanza internazionale nell'ambito della Computer Science a cui il candidato ha partecipato in qualità di membro del comitato di programma tecnico-scientifico.

- 2018 23rd ACM International Conference on Intelligent User Interfaces - ACM IUI (PC member of Poster and Demo track). Tokyo, Japan, 7-11 marzo 2018.  
[CORE2018: Rank A in Information Systems, GII-GRIN-SCIE: Rank A]
- 2018 26th Conference on User Modeling, Adaptation and Personalization - ACM UMAP (PC member of "Personalized Recommender Systems"). Singapore, 8-11 luglio 2018.  
[CORE2018: Rank B in Information Systems, GII-GRIN-SCIE: Rank B]
- 2018 1st Symposium on Learning Analytics, in the framework of the conference Information Visualization - IV. Salerno, Italy, 10-13 luglio 2018.
- 2017 22nd International Conference on Intelligent User Interfaces 2017, poster and demo sessions - ACM IUI. Limassol, Cyprus, 13-16 marzo 2017.  
[CORE2018: Rank A in Information Systems, GII-GRIN-SCIE: Rank A]
- 2017 10th International Conference on Advances in Human-oriented and Personalized Mechanisms, Technologies, and Services - CENTRIC. Athens, Greece, 8-12 ottobre 2017.
- 2017 25th Conference on User Modeling, Adaptation and Personalization - ACM UMAP. Bratislava, Slovakia, 9-12 luglio 2017.  
[CORE2018: Rank A in Information Systems, GII-GRIN-SCIE: Rank A]
- 2017 5th International Conference on Computer Science Applied Mathematics and Applications - ICCSAMA. Berlin, Germany, 30 giugno - 1 luglio 2017.
- 2017 3rd International Conference on Signal and Image Processing - SIPRO. Dubai, UAE, 28-29 gennaio 2017.
- 2016 International Conference on Intelligent Cloud Computing - ICC. Wuhan, China, 17-18 dicembre 2016.
- 2016 9th International Conference on Advances in Human-oriented and Personalized Mechanisms, Technologies, and Services - CENTRIC. Brussels, Belgium. 21-25 agosto 2016.
- 2016 24th Conference on User Modeling, Adaptation and Personalization - ACM UMAP. Halifax, Canada, 13-17 luglio 2016.  
[CORE2018: Rank B in Information Systems, GII-GRIN-SCIE: Rank B]
- 2015 23rd Conference on User Modeling, Adaptation and Personalization - UMAP. Dublin, Ireland. 29 giugno - 3 luglio 2015.  
[CORE2018: Rank B in Information Systems, GII-GRIN-SCIE: Rank B]
- 2015 16th International Conference on Electronic Commerce and Web Technologies - EC-Web. Valencia, Spain, 1-2 settembre 2015.  
[CORE2018: Rank B in Information Systems]
- 2013 14th International Conference on Electronic Commerce and Web Technologies - EC-Web. Prague, Czech Republic, 26-30 agosto 2013.  
[CORE2018: Rank B in Information Systems]
- 2012 23rd ACM conference on Hypertext and social media - ACM HYPERTEXT (HT), Milwaukee, Wisconsin, U.S.A. 25-28 giugno 2012.  
[CORE2018: Rank A in Information Systems, GII-GRIN-SCIE: Rank A]
- 2012 13th International Conference on Electronic Commerce and Web Technologies - EC-Web. Vienna, Austria, 3-7 settembre 2012.  
[CORE2018: Rank B in Information Systems]
- 2009-2017 International Conference on Autonomic and Autonomous Systems - ICAS.
- 2008 4th International Conference on Autonomic and Autonomous Systems - Track Knowledge-based User Interface KUI. Gosier, Guadeloupe, 16-21 marzo 2008.



**RELATORE PRESSO CONFERENZE E CONVEGNI**

Selezione di convegni, conferenze e tavole rotonde nell'ambito della Computer Science, di rilevanza nazionale e internazionale, a cui il candidato ha partecipato come relatore o invited speaker.


- 2018 Invited Speaker della Tavola Rotonda relativa al convegno "La distribuzione tra intelligenza artificiale e abitudini di consumo" organizzata da Confcommercio. Sala Abbascia, Sede Confcommercio, Piazza G.G. Belli 2, Rome, Italy. 12 Aprile, 2018. Rilevanza nazionale. Partecipazione su invito.
- 2017 Invited speaker presso il workshop internazionale User Modeling and Recommender Systems, organizzato dal prof. Tsvi Kuflik presso l'Università di Haifa, Israele, 17-19 Luglio 2017. Titolo del talk: "Improving News Recommendation by Monitoring the Perception of News Content on Social Networks: A Methodology". Rilevanza internazionale.
- 2017 Relatore presso il 25th Int. Conference on User Modeling, Adaptation and Personalization, UMAP '17. Bratislava, Slovakia, 9-12 luglio 2017. Titolo del talk: "Course-driven teacher modeling for learning objects recommendation in the moodle lms". Rilevanza internazionale.  
[CORE2018: Rank B in Information Systems, GII-GRIN-SCIE: Rank B]
- 2016 Relatore presso il 13th Int. Conference on Intelligent Tutoring Systems, ITS 2016. Zagreb, Croatia, 7-10 giugno 2016. Titolo del talk: "Automatic extraction of prerequisites among learning objects using wikipedia-based content analysis". Rilevanza internazionale.  
[CORE2018: Rank A in Information Systems, GII-GRIN-SCIE: Rank A-]
- 2014 Relatore presso il 22nd Int. Conference on User Modeling, Adaptation, and Personalization, UMAP 2014. Aalborg, Denmark, 7-11 luglio 2014. Titolo del talk: "iScur: Interest and sentiment-based community detection for user recommendation on Twitter". Rilevanza internazionale.  
[CORE2018: Rank B in Information Systems, GII-GRIN-SCIE: Rank B]
- 2012 Invited speaker al "SASWeb 2012: Semantic and Adaptive Social Web workshop", organizzato da Lora Aroyo, Federica Cena, Antonina Dattolo, Pasquale Lops, Julita Vassileva. In concomitanza con la 20th Conference on User Modeling, Adaptation, and Personalization. Montreal, Canada, 16-20 Luglio 2012. Titolo del talk: "Exploring folksonomies for adaptive query expansion". Rilevanza internazionale.

**ORGANIZZAZIONE DI CONFERENZE INTERNAZIONALI**

- 2013 Local Arrangements Co-chair della 21<sup>st</sup> Conference on User Modeling, Adaptation and Personalization UMAP 2013, avuta luogo a Roma, dal 10 al 14 giugno 2013. UMAP è una conferenza di rilevanza internazionale nell'ambito della Computer Science, ed è la conferenza di riferimento per le ricerche sui sistemi intelligenti adattivi e la modellazione del comportamento e degli interessi dell'utente. E' nata nel 2009 dalla fusione delle conferenze User Modeling (UM) e Adaptive Hypermedia and Adaptive Web-based Systems (AH). URL: <http://www.dia.uniroma3.it/~umap2013/>.

**PARTECIPAZIONE A COMITATI DI DOCTORAL CONSORTIUM**

- 2017 25th Conference on User Modeling, Adaptation and Personalization - ACM UMAP. Bratislava, Slovakia, 9-12 luglio 2017.
- 2016 24th Conference on User Modeling, Adaptation and Personalization - ACM UMAP. Halifax, Canada, 13-17 luglio 2016.
- 2014 22nd Conference on User Modeling, Adaptation and Personalization - UMAP. Aalborg, Denmark, 7-11 luglio 2014.
- 2013 21st Conference on User Modeling, Adaptation and Personalization - UMAP. Rome, Italy, 10-14 giugno 2013.

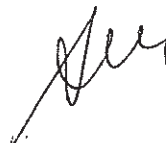


## MEMBRO DI COMITATI EDITORIALI

- 2018 Guest Editor della rivista internazionale "Personal and Ubiquitous Computing" (ISSN 1617-4909) per la Special issue su "Mining Social Networks for Local Search and Location-based Recommender Systems". Gli altri Guest editors sono: Damianos Gavalas (University of the Aegean, Greece), Sergio Ilarri (University of Zaragoza, Spain), Francesco Ricci (Free University of Bozen-Bolzano, Italy), Zhiwen Yu (Northwestern Polytechnical University, China).  
La rivista ha i seguenti ranking: Scimago Quartile 2 nel campo della Computer Science Applications, Source Normalized Impact per Paper SNIP: 1.52, SCImago Journal Rank SJR: 0.39, JCR ISI Thomson Reuters Impact Factor IF: 1.924. I ranking SNIP, SJR e Scimago Quartile sono stati valutati al 19 luglio 2018, mentre JCR IF al 2017.
- 2017 Membro del Comitato Editoriale in qualità di Associate Editor della rivista internazionale "IEEE Access" (ISSN 2169-3536).  
La rivista ha i seguenti ranking: Scimago Quartile 1 nel campo della Computer Science, Source Normalized Impact per Paper SNIP: 1.76, SCImago Journal Rank SJR: 0.55, JCR ISI Thomson Reuters Impact Factor IF: 3.557. I ranking SNIP, SJR e Scimago Quartile sono stati valutati al 19 luglio 2018, mentre JCR IF al 2017.
- 2017 Lead Guest Editor su invito della rivista internazionale "Mobile Information Systems" (ISSN 1574-017X) per la Special issue su "Advances in Personalized Mobile Services". Gli altri Guest editors sono: Federica Gena (University of Torino, Italy), Damianos Gavalas (University of the Aegean, Greece), Shuk Ying Ho (The Australian National University, Australia), Bin Liu (IBM Thomas J. Watson Research Center, USA), Dingqi Yang (University of Fribourg, Switzerland).  
La rivista ha i seguenti ranking: Scimago Quartile 3 nel campo della Computer Science Applications, Source Normalized Impact per Paper SNIP: 0.57, SCImago Journal Rank SJR: 0.22, JCR ISI Thomson Reuters Impact Factor IF: 0.958. I ranking SNIP, SJR e Scimago Quartile sono stati valutati al 19 luglio 2018, mentre JCR IF al 2017.

## REVISORE SU INVITO PER RIVISTE INTERNAZIONALI

- 2018 User Modeling and User-Adapted Interaction, GE:Pasquale Lops, Dietmar Jannach, Cataldo Musto, Toine Bogers, Marijn Koolen (ISSN 0924-1868)
- 2017 International Journal of Human-Computer Studies, GE:Cristina Gena (ISSN 1071-5819)
- 2017 IEEE Access, AE:Bora Onat (ISSN 2169-3536)
- 2017 IEEE Transactions on Multimedia, AE:Benoit Huet (ISSN 1520-9210)
- 2016 IEEE Transactions on Multimedia, AE:Sen-Ching Samson Cheung (ISSN 1520-9210)
- 2016 Information Processing and Management AE:Ian Ruthven (ISSN 0306-4573)
- 2015 User Modeling and User-Adapted Interaction, EiC:Alfred Kobsa (ISSN 0924-1868)
- 2014 International Journal Distance Education Technologies, AE:Marco Temperini (1539-3100)
- 2014 Information Processing Letters, E:W.L. Hsu (ISSN 0020-0190)
- 2010 User Modeling and User-Adapted Interaction Special Issue Data Mining for Personalized Educational Systems, GE:Cristobal Romero and Sebastian Ventura (ISSN 0924-1868)
- 2009 Connection Science, AE:Amanda Sharkey (ISSN 0954-0091)




**RESPONSABILITA' ISTITUZIONALI**

- 2018 Membro della commissione di Esami di stato per l'abilitazione professionale in Ingegneria - Università degli Studi Roma Tre
- 2017- Membro della Task Force Intelligenza Artificiale promossa dalla Agenzia per l'Italia Digitale (AgID). La missione della task force è definire raccomandazioni e linee guida per la pubblica amministrazione italiana che derivano dalle recenti innovazioni e risultati scientifici ottenuti nell'ambito delle ricerche sulla Intelligenza Artificiale. Entra a far parte del gruppo di coordinamento della Task force dopo una selezione nazionale del AgID terminata il 28 aprile 2017, con esito positivo comunicato in data 26 luglio 2017. URL: <https://ia.italia.it/>
- 2012-2013 Membro della commissione di Esami di stato per l'abilitazione professionale in Ingegneria - Università degli Studi Roma Tre
- 2006- Stabilmente membro delle commissioni di Laurea e Laurea magistrale della Facoltà di Ingegneria - Università degli Studi Roma Tre

**ATTIVITA' DI RICERCA PRESSO QUALIFICATI ISTITUTI STRANIERI**

- 2017 Partecipazione alle attività di ricerca del seguente laboratorio internazionale: Nokia Bell Labs (già Bell Labs). L'attività formalizzata con un incarico di ricerca su tematiche di Computer Science ("Health recommender systems") ha avuto luogo presso il laboratorio del Nokia Bell Labs di Cambridge, UK, dal 26 luglio 2017 al 26 ottobre 2017. In allegato alla domanda del candidato la dichiarazione del Team manager del laboratorio e supervisore Dr. Daniele Quercia sulla suddetta attività.
- 2004 Partecipazione alle attività di ricerca del seguente laboratorio internazionale: Palo Alto Research Center PARC (già Xerox PARC), Palo Alto, CA, USA. L'attività formalizzata con un incarico di ricerca su tematiche di Computer Science ("Goal inference with web data") ha avuto luogo presso il laboratorio di Information Science and Technologies del PARC in due periodi: dal 24 maggio 2004 al 8 agosto 2004, e dal 3 settembre 2004 al 17 dicembre 2004. In allegato alla domanda del candidato la dichiarazione del Research fellow del laboratorio e supervisore Dr. Peter Pirolli sulla suddetta attività.

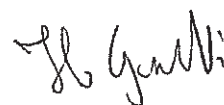
**TITOLARITA' DI BREVETTI**

- 2013 Co-inventore del brevetto US8606781 B2 (Type: Granted) classificato nell'ambito della Computer Science, dal titolo "Systems and methods for personalized search". Anno deposito 2005 - Anno concessione 2013. Abstract: "Techniques are presented to provide personalized search results to a user. A user history optionally classified into projects or tasks is determined. A profile for the user is determined by identifying keywords, concepts or other user and/or task specific descriptors within user history documents. A proximal neighborhood based on the user's history and adjustable crawling parameters is determined. The adjustable crawling parameters define which documents linked to documents in the user history are included within the proximal neighborhood. A user query is determined and used to search the set of documents within the proximal neighborhood. The results are then ranked based on the user profile information. The ranked results are optionally displayed to the user."



## PRINCIPALI PARTECIPAZIONI ALLE ATTIVITA' DI GRUPPI DI RICERCA

- 2010 Partecipazione alle attività del gruppo di ricerca di Intelligenza Artificiale del Dipartimento di Informatica e Automazione della Università degli Studi Roma Tre nell'ambito del progetto di ricerca FAR del MIUR: "KEEN - Knowledge - based Extended ENterprise". Il progetto è stato co-finanziato dal MIUR ed è caratterizzato da collaborazioni a livello nazionale. La partecipazione del candidato relativamente al progetto è stata formalizzata per mezzo di un contratto sulla specifica attività "Progettazione di un sistema Case-based per l'estrazione semantica di contenuti da fonti ipertestuali", con copia in allegato alla domanda (file 2010-KEEN\_FAR.pdf). Dal 1 febbraio 2010 al 31 luglio 2010.
- 2008 Partecipazione alle attività del gruppo di ricerca CRMPA (Centro di Ricerca in Matematica Pura ed Applicata) nell'ambito del progetto di ricerca "NewGenLearn - Servizi ed Applicazioni Avanzate per le-learning di Nuova Generazione". L'attività di ricerca relativa al progetto che ha coinvolto il candidato ha interessato il Work Package 4.2 e ha contribuito ai deliverable previsti dallo stesso WP. Il progetto è stato co-finanziato su fondi POR Campania 2000-2006 ed è caratterizzato da collaborazioni a livello nazionale. La partecipazione è stata formalizzata per mezzo di un contratto, con copia in allegato alla domanda (file 2008\_newgenlearn\_POR\_WP4.2.pdf). Dal 1 luglio 2008 al 31 dicembre 2008.
- 2002-2003 Partecipazione alle attività del gruppo di ricerca CRMPA (Centro di Ricerca in Matematica Pura ed Applicata) nell'ambito del progetto di ricerca "Diogene - A Training Web Broker for ICT Professionals". Il progetto è stato co-finanziato dalla Commissione Europea nell'ambito di FP5-IST (contract IST-2001-33358) ed è caratterizzato da collaborazioni a livello internazionale. La partecipazione del candidato relativamente al progetto è stata formalizzata per mezzo di un contratto, con copia in allegato alla domanda (file 2002\_diogene\_IST-2001-33358.pdf). Dal 2 aprile 2002 al 31 dicembre 2003.
- 2001-2002 Partecipazione alle attività del gruppo di ricerca CRMPA (Centro di Ricerca in Matematica Pura ed Applicata) nell'ambito del progetto di ricerca "M-LEARNING - Mobile Communications Technologies for Young Adults Learning and Skills Development". Il progetto è stato co-finanziato dalla Commissione Europea nell'ambito di FP5-IST (contract IST-2000-25270) ed è caratterizzato da collaborazioni a livello internazionale. La partecipazione del candidato relativamente al progetto è stata formalizzata per mezzo di un contratto, con copia in allegato alla domanda (file 2001\_m-learning\_IST-2000-25270.pdf). Dal 3 dicembre 2001 al 31 marzo 2002.





**ESPERIENZE PROFESSIONALI CARATTERIZZATE DA ATTIVITA' PROGETTUALI DI RICERCA**

- 2008 Incarico di attività professionale affidata dal CRMPA (Centro di Ricerca in Matematica Pura ed Applicata) nell'ambito dell'obiettivo OR 2 (Studio di servizi e contenuti Intelligenti) RI 2.3 (Definizione di modelli per la descrizione di regole di adattamento di contenuti) del progetto SAPI: "Studio di un sistema intelligente ad uso degli ipovedenti per servizi di assistenza al pagamento multimediali - self service". L'esperienza caratterizzata da attività di ricerca è consistita nella redazione di un deliverable relativo al task di Ricerca Industriale 2.3  
Dal 19 marzo 2008 al 30 giugno 2008. In allegato copia del contratto con indicazioni su durata dell'attività, e parte del capitolato tecnico del progetto con indicazioni sugli OR e RI (file 2008-sapi.pdf e 2008-sapi2.pdf).
- 2005 Incarico di attività professionale affidata dal Dipartimento di Informatica e Automazione della Università degli Studi Roma Tre (resp. Prof. Giovanni Ulivi) dal titolo "Metodi e tecniche per il reperimento della conoscenza". L'esperienza caratterizzata da attività di ricerca è consistita nella redazione di un rapporto tecnico per descrivere metodi e tecniche innovative nel suddetto ambito della Computer Science.  
Dal 07 luglio 2005 al 07 settembre 2005.
- 2004 Incarico di attività professionale affidata dal Dipartimento di Informatica e Automazione della Università degli Studi Roma Tre (resp. Prof. Alfonso Miola) dal titolo "Studio di Sistemi di E-learning basati su Agenti". L'esperienza caratterizzata da attività di ricerca è consistita nella redazione di un rapporto tecnico per descrivere metodi e tecniche innovative nel suddetto ambito della Computer Science.  
Dal 07 giugno 2004 al 31 ottobre 2004.





**DESCRIZIONE ATTIVITA' DI RICERCA**

Le principali attività di ricerca riguardano l'indagine metodologica, la progettazione, la realizzazione e la sperimentazione di sistemi di Intelligenza Artificiale. L'attività può essere raggruppata nelle seguenti sotto-aree di cui si elencheranno in sintesi alcuni risultati ottenuti:

1. Personalized Search basata su Modelli Utente
2. Recommender Systems
3. Strumenti di Ricerca automatica di Informazione (Focused Crawling)
4. Sistemi Intelligenti di Supporto all'Apprendimento

**1. Personalized Search basata su Modelli Utente**

La tecnica di query expansion è ormai consolidata all'interno del dominio del Information Retrieval. Tipicamente si impiegano matrici bidimensionali per ricavare informazioni di co-occorrenza tra termini, che sono impiegate per modificare le query utente aggiungendo automaticamente nuovi termini che meglio rappresentano il bisogno informativo corrente. Sebbene di semplice impiego, tale approccio soffre di numerosi svantaggi derivati dall'impiego del linguaggio naturale per rappresentare i documenti e le query utente. Sinonimia e polisemia tendono a ridurre le performance in termini di precisione e recall dei risultati. Mentre tecnologie puramente semantiche di rappresentazione della conoscenza (es. Semantic Web) sono ancora distanti dall'essere impiegate su larga scala.

Lo scopo della presente attività di ricerca è stato quello di definire un innovativo sistema di query expansion basato su rappresentazioni semantiche *weak* [j6,c14,c11,c6,w8,b2]. Analizzando i dati contenuti all'interno di servizi di annotazione quali Delicious o StumbleUpon, è stato possibile definire una rappresentazione matriciale a 3 dimensioni, dove la dimensione aggiuntiva rispetto al caso tradizionale bidimensionale document-keyword, associa categorie semantiche (o campi) ai termini. Tali informazioni sono estratte dalle folksonomie costruite dagli utenti impiegando i suddetti servizi di annotazione online. Il processo di costruzione analizza il contenuto dei documenti annotati e i relativi tag in modo da individuare le categorie semantiche e i termini che più versomilmente sono affini ad esse. Informazioni quali l'insieme delle pagine visitate o i termini sottomessi come query sono sfruttati per costruire rappresentazioni di profili utente che vengono poi confrontati con i termini rappresentativi delle campi semantiche. Sono infine selezionati i campi più affini al profilo dell'utente, e le relative co-occorrenze vengono impiegate per disambiguare ed espandere la query. Ampio studio è stato dedicato alla valutazione dell'efficacia del sistema proposto. La valutazione comparativa è stata suddivisa in tre sotto-sperimentazioni: TREC corpus-based evaluation, ODP corpus-based evaluation, web user-based evaluation che include Google come baseline. In tutte e tre le sperimentazioni, misure standard di valutazione hanno dimostrato come il sistema proposto è più efficace rispetto sia a sistemi presentati in letteratura (es. Relevance feedback), sia a sistemi popolari attualmente in uso sul web (es. Google). La piattaforma sperimentale proposta ha il vantaggio di poter facilmente replicare le sperimentazioni, includendo ulteriori approcci a confronto. La possibilità di includere informazioni implicite (es. query utente e documenti visitati) è una peculiarità che rende la piattaforma adatta a sperimentare i moderni sistemi di personalized search.

In [j7] il comportamento dell'utente durante le attività di browsing viene analizzato con rappresentazioni DOM-based, e tecniche di clustering di template html allo scopo di identificare le unità informative testuali più rilevanti per la modellazione degli interessi dell'utente. Anche in questo caso lo scopo è di risalire ai bisogni informativi dell'utente, ma in questo caso monitorando implicitamente le sue attività abituali di navigazione. Il vantaggio di tale tecnica è la conformità alla privacy dell'utente poiché l'algoritmo è adatto a implementazioni client-side, dove perciò non è richiesto il trasferimento per intero dei dati sui servizi remoti, se non dopo il consenso dello stesso utente. La sperimentazione comparativa ha considerato tutte le tecniche che costituiscono lo stato dell'arte, mostrando significativi miglioramenti in termini di accuratezza.

## 2. Recommender Systems

Nell'ambito dei film sono stati avanzati due approcci entrambi basati su tecniche di elaborazione dei segnali e delle immagini [w7]. In particolare, è stata definita un'innovativa modellazione utente basata sulla teoria delle trasformate Wavelet (Yves Meyer, 1992), dove le variazioni temporali delle caratteristiche associate ai comportamenti degli utenti vengono esplicitamente tenute in considerazione. A differenza degli approcci di matching user-item tradizionali, dove due utenti sono così considerati simili se hanno elementi in comune (es. film visti e brani musicali ascoltati) ma la variabile tempo viene tipicamente ignorata per motivi di efficienza, la teoria delle Wavelet permette di rappresentare e confrontare segnali temporali associati a comportamenti utente (es. numero di volte in cui un brano è stato ascoltato) su diverse risoluzioni (es. giornalmente/mensilmente). Questo permette di determinare similarità dei comportamenti dell'utente anche parziali, relative a specifici elementi o archi temporali, rendendo la misurazione più accurata.

Un approccio anch'esso basato sulle trasformate Wavelet è stato realizzato e valutato con successo nella raccomandazione di utenti all'interno di Social networks [c27]. Tipicamente i social network services sul web forniscono funzionalità di suggerimento di nuovi utenti con cui instaurare una relazione di *following* o *friendship* (es. "Who-to-follow"). Gli attuali approcci di raccomandazione si limitano perlopiù a considerare il social graph costruito in base alle relazioni tra utenti, e fornisce suggerimenti in base ad amicizie o followers in comune (tecnica spesso chiamata "Friend-of-Friend"). Il sistema proposto valuta i contenuti pubblicati tra utenti ed eventuali similarità, considerando altresì l'informazione temporale associata al momento della pubblicazione. In questo modo, una relazione tra due utenti può stabilirsi non solo se parlano o condividono risorse simili, ma anche se l'interazione con tali risorse ha pattern temporalmente simili. La sperimentazione comparativa effettuata sul social network Twitter ha dimostrato come l'approccio è più efficace rispetto ad altri già noti in letteratura.

Nell'ambito dello stesso scenario, è stato proposto un originale approccio di raccomandazione basato sulla tecnica di sentiment analysis [j9,c18,c8,w9]. L'ipotesi è che utenti che condividono stessi interessi e manifestano le stesse attitudini (es. opinioni) su particolari topic verosimilmente hanno più probabilità di avere legami all'interno dei social network (omofilia). Per tale motivo, l'approccio proposto non si limita a considerare sovrapposizioni nei concetti trattati dagli utenti, ma analizza anche l'eventuale opinione espressa dagli stessi. Una sperimentazione comparativa preliminare ne ha dimostrato l'efficacia in confronto ad altri due approcci proposti in letteratura. Ulteriori valutazioni hanno esteso l'ipotesi anche al dominio della community detection [c12] dimostrandone l'efficacia in vari contesti di discussione (e.g., politica, tecnologia, automotive).

Rimanendo nel dominio del Web 2.0 e, in particolare, all'analisi del user-generated data per sviluppare sistemi di raccomandazione più efficienti, è stato ideato e valutato un approccio di analisi dei commenti degli utenti nella piattaforma Youtube allo scopo di migliorare il ranking di video simili ottenuto da raccomandatore di default del servizio [c19]. Una valutazione comparativa su utenti reali ne ha dimostrato l'efficacia. Il lavoro è il primo in letteratura che si occupa di incrementare le performance di Youtube con un approccio di re-ranking.

Uno studio correlato ai sistemi di raccomandazione e sistemi di filtering su social network ha avuto l'obiettivo di analizzare il flusso di informazioni generate dai microblogging services (es. Twitter), e determinare gli elementi informativi di maggiore interesse data una query [c7]. La tecnica proposta, basata su annotatori semantici e tecniche di query expansion ha dimostrato una buona efficacia all'interno della challenge internazionale TREC Microblog 2012 Track su dataset di test condiviso tra tutti i partecipanti.

Ulteriori risultati rilevanti nell'ambito dei RecSys sono stati ottenuti definendo modelli utente basati su informazioni estratte durante l'impiego di dispositivi mobili (smartphones) allo scopo di raccomandare punti di interesse (es. punti di ristoro, hotel) riducendo l'impiego di strumenti tradizionali di ricerca [j5,c24,c4]. Lo studio è rivolto soprattutto a sistemi di raccomandazione location-based, dove l'informazione relativa alla posizione corrente dell'utente deve essere combinata con le preferenze manifestate dall'utente stesso [j8]. I principali risultati ottenuti riguardano la combinazione di tecniche di modellazione utente tag-based e rappresentazioni esplicite del contesto corrente basate su reti neurali, con lo scopo di filtrare i possibili punti di interesse e proporli su dispositivo mobile sotto forma di

mappa. Tecniche di data extraction sono state applicate su popolari sorgenti di review online per estendere il dizionario dei tag usato per rappresentare ogni categoria di punti di interesse. L'approccio risulta innovativo essendo il primo a considerare e combinare più fattori (i.e., preferenze utente, contesto attuale e analisi delle review online) per determinare punti di maggiore interesse per uno specifico utente. Un'estesa sperimentazione ha riguardato la categoria dei punti di ristoro, la più popolare tra gli utenti dei location-based services (es. Yelp, TripAdvisor). I risultati ottenuti dimostrano l'efficacia dell'approccio in confronto ad altri approcci online normalmente impiegati dagli utenti, e tecniche standard basate sul Collaborative filtering.

In [c32,c28] sono stati valutati due distinti approcci per identificare le expertise degli utenti in domini scientifici. Il primo basato su approcci content-based e deep learning, e il secondo collaborativo. Ambedue rappresentano il dominio con relazioni tra entità mediante una struttura graph-based. Tale modellazione risulta funzionale nel contesto della raccomandazioni di articoli scientifici o di esperti in particolari settori di interesse.

Recenti attività sono rivolte allo sfruttamento di repository online di informazioni Linked Open Data (LOD) allo scopo di migliorare l'efficacia delle raccomandazioni e includere elementi informativi aggiuntivi codificati mediante rappresentazioni semantiche nel dominio del suggerimento di punti di interesse in ambito culturale [s1].

### 3. Strumenti di Ricerca automatica di Informazione (Focused Crawling)

L'obiettivo di questa attività di ricerca è stata la realizzazione di un Focused crawler adattivo per domini ipertestuali e social network. L'ipotesi fatta è che un approccio statistico sia capace di apprendere e adattarsi durante l'esplorazione del web o di una rete sociale. Ogniqualvolta nuova informazione è disponibile, si analizzano le features estratte dalla rappresentazione graph-based che meglio rappresentano i percorsi più promettenti.

I risultati dell'attività di ricerca ottenuti nel dominio del web [b3,c1,w2], dove l'approccio statistico è formalizzato mediante l'impiego del paradigma Ant (Dorigo e Stützle 2004), mostrano come tale ipotesi è verificata, e garantisce la possibilità che il crawler si adatti allo specifico dominio e a potenziali alterazioni della query e dell'ambiente.

### 4. Sistemi Intelligenti di Supporto all'Apprendimento

Nell'ambito dei sistemi di supporto all'apprendimento in ambito ipertestuale, in [j3] è stato impiegato il paradigma didattico del self-directed learning (Knowles 1975) e quello epistemologico del costruttivismo (Piaget 1937) per lo sviluppo di un Adaptive Hypermedia Navigation system basato sui casi, in grado di riconoscere i learning goals analizzando i percorsi ipermediali degli utenti e adattare i contenuti ipertestuali dinamicamente. Gli attuali sistemi di computer-based learning utilizzati per il supporto all'apprendimento sono solitamente basati su approcci direttivi per la gestione della conoscenza. Il materiale didattico è organizzato in percorsi formativi più o meno statici, senza contemplare le conoscenze pregresse, lo stile di apprendimento e l'interazione del discente col sistema software. Oltre al paradigma didattico del self-directed learning, il sistema sfrutta il paradigma epistemologico del costruttivismo. Il costruttivismo pone sostanzialmente il discente al centro del processo formativo (learning centered). La conoscenza viene vista perciò come il prodotto di una costruzione attiva da parte del soggetto, ed è strettamente collegata alla situazione concreta in cui avviene l'apprendimento. Il self-directed learner stabilisce i propri percorsi e traguardi di apprendimento nonché i criteri di accertamento del raggiungimento del sapere. In altre parole, lo stile di apprendimento viene personalmente scelto dal discente in base alle proprie preferenze e capacità e conoscenze pregresse. Il sistema ipermediale adattivo sviluppato è in grado di riconoscere i learning goals analizzando i diversi percorsi ipermediali degli utenti. In base a tali percorsi, il sistema suggerisce percorsi addizionali con l'obiettivo di massimizzare l'apprendimento del discente. Un approccio sub-symbolic per la rappresentazione della conoscenza e un case-based reasoner permettono di gestire la conoscenza del sistema e analizzare il comportamento dell'utente in modo totalmente non intrusivo. Una sperimentazione nel dominio del cinema neo-realista ha dimostrato l'efficacia del sistema nel suggerire percorsi tematici di interesse. In [j4] le



stesse teorie sono state considerate per sviluppare un assistente alla scrittura di lettere commerciali in inglese. Un'originale rappresentazione del dominio ispirata agli studi di esperti linguisti ha permesso di suddividere ogni lettera commerciale in una serie di mosse discorsive. Oltre a fornire funzionalità di adattività in base alle caratteristiche e conoscenza dell'utente, il sistema ha la possibilità di arricchire la base di conoscenza aggiungendo nuovi template.

Nell'ambito del supporto alla redazione di corsi con materiale didattico in formato elettronico, sono state sviluppate innovative tecniche di analisi dei contenuti testuali estratti da learning objects allo scopo di identificare in modo automatico potenziali relazioni di prerequisito (o dipendenza concettuale) [j10,c25,c23-c20,c17]. Tali relazioni possono agevolare il docente nel costruire nuovi corsi interrogando repository online di materiale didattico esistente (es. Ariadne e Connexions), e comporre più velocemente tali elementi rispettando il giusto ordine didattico-concettuale. Valutazioni sperimentali su varie tipologie di corsi hanno confermato l'efficacia dell'approccio content-based proposto. Inoltre è stato definito e reso pubblico un dataset di prerequisiti su material estratto da corsi online (<http://ai-lab-03.dia.uniroma3.it/datasets/lm2016/>) per agevolare sperimentazioni comparative. Per mezzo di tali tecniche è stato possibile proporre nuovi sistemi per il supporto alla creazione di corsi didattici online [c31-c29,c16,c15]. Mediante una modellazione delle caratteristiche dei docenti basata sui Grasha-Riechmann teaching styles (Grasha 1995), e dei learning object indicizzati mediante un repository locale con approccio content-based, il sistema propone corsi personalizzati creati dinamicamente dove le singole unità didattiche vengono automaticamente sequenziate. Il docente ha la possibilità di raffinare i corsi prima della pubblicazione mediante una interfaccia Web.



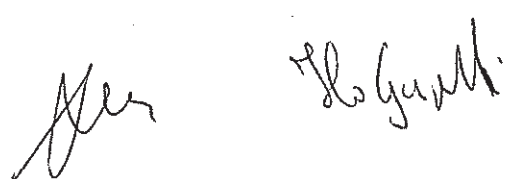
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- [c27] Giuseppe Sansonetti, Davide Feltoni Gurini, Fabio Gasparetti, and Alessandro Micarelli. Dynamic social recommendation. In *Proceedings of the 2017 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining 2017, ASONAM '17*, pages 943–947, New York, NY, USA, 2017. ACM. ISBN 978-1-4503-4993-2. URL <http://dx.doi.org/10.1145/3110025.3110149>
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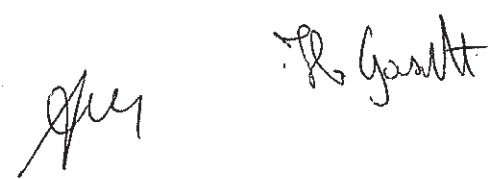
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### Workshops Internazionali

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- [w3] Fabio Gasparetti, Universit Degli Studi, and Alessandro Micarelli. User profile generation based on a memory retrieval theory. In *Proceedings of the 1st International Workshop on Web*





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- [w2] Fabio Gasparetti and Alessandro Micarelli. Adaptive web search based on a colony of cooperative distributed agents. In Matthias Klusch, Sascha Ossowski, Andrea Omicini, and Heimo Laamanen, editors, *Cooperative Information Agents VII, 7th International Workshop, CIA 2003, Helsinki, Finland, August 27-29, 2003, Proceedings*, volume 2782 of *Lecture Notes in Computer Science*, pages 168–183. Springer, 2003. ISBN 3-540-40798-7. URL [http://dx.doi.org/10.1007/978-3-540-45217-1\\_13](http://dx.doi.org/10.1007/978-3-540-45217-1_13)
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### Contributi su Enciclopedie

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### Guest editor di Special Issues

- [si2] Fabio Gasparetti, Damianos Gavalas, Sergio Ilari, Francesco Ricci, and Zhiwen Yu (eds). *Special issue on Mining Social Networks for Local Search and Location-based Recommender Systems - Journal of Personal and Ubiquitous Computing*, volume -. Springer, - 2018. (lead guest editor: Fabio Gasparetti)
- [si1] Federica Cena, Fabio Gasparetti, Damianos Gavalas, Shuk Y. Ho, Bin Liu, and Dingqi Yang. Advances in personalized mobile services. *Mobile Information Systems*, 2018:1–2, jun 2018. URL <https://doi.org/10.1155/2018/6047696>. (lead guest editor: Fabio Gasparetti; Special Issue by invitation)

### Sottomissioni under review

- [s1] Giuseppe Sansonetti, Fabio Gasparetti, Alessandro Micarelli, Federica Cena, and Cristina Gena. Enhancing cultural recommendations through social and linked open data. *User Modeling and User-Adapted Interaction: Special Issue on Personalized Delivery of Cultural Heritage Content*, pages –, 2018. (under 2<sup>nd</sup> round of revision)

Roma, 3 agosto 2018

Fabio Gasparetti



# CURRICULUM VITAE



First name: Riccardo  
Surname: Lazzeretti

## Job Experience:

- **March 2017 - On going:** Assistant professor (*RTD-A* Art. 24 Legge 240/2010) at Department of Computer, Control, and Management Engineering Antonio Ruberti at Sapienza University of Rome, Italy. *Research Center of Cyber Intelligence and Information Security (CIS)*, previously lead by Prof. Roberto Baldoni and now by Prof. Alberto Marchetti-Spaccamela. *Topic:* Malware Detection and Analysis in complex distributed systems
- **September 2016 - February 2017:** Research grant (*Assegno di ricerca* Art. 22 Legge 240/2010) at Mathematics Department, University of Padua, Italy.  
*Supervisor:* Prof. Mauro Conti  
*Topic:* Content Centric Networking: Security and Privacy Issues.
- **November 2015 - January 2016:** Researcher at Cynny s.p.a., Florence, Italy.  
*Goal:* Implementation of convolutional neural networks for object and emotion detection in images.  
*Activities:* Investigation of existing solution; study and improvement of scientific algorithms; implementation (Python, Google's Tensorflow).
- **April 2015 - October 2015:** Six months project collaboration contract (Co.Co.Co.) at Information Engineering and Mathematics Department, University of Siena, Italy.  
*Supervisor:* Prof. Mauro Barni  
*Topic:* Analysis of Privacy Preserving algorithms for multi-modal biometric authentication.  
*Activities:* Scientific research; Prototyping and optimization (Matlab); Tutoring of Master and PhD students; Dissemination (writing of scientific papers for renowned journals and conferences, talks in conferences); Proposal of research projects to European H2020 calls (project definition, work plan definition - PERT and GANTT chart, resource assessment, risk assessment, etc.)
- **April 2013 - March 2015:** Research grant (*Assegno di ricerca* Art. 22 Legge 240/2010) at Information Engineering and Mathematics Department, University of Siena, Italy.  
*Supervisor:* Prof. Mauro Barni  
*Topic:* Development of Privacy Preserving algorithms for encrypted signal processing in biometric scenarios.  
*Activities:* Scientific research; Prototyping and optimization (Matlab); Implementation and testing (C++ and Java); Tutoring of Master and PhD students; Dissemination (frontal lessons, writing of chapters for scientific books, scientific papers for renowned journals and conferences, talks at conferences); Proposal of research projects to European H2020 calls (project definition, work plan definition - PERT and GANTT chart, resource assessment, risk assessment, etc.).
- **April 2011 - March 2013:** Research grant (*Assegno di ricerca* Art. 51 c.6 Legge 449 - 27/12/1997) at Information Engineering Department, University of Siena, Italy.  
*Supervisor:* Prof. Mauro Barni  
*Topic:* Development of encrypted-domain data fusion protocols for Electronic Warfare applications.  
*Activities:* Scientific research; Prototyping and optimization (Matlab); Implementation and testing (C++ and Java); Tutoring of Master students; Dissemination (frontal lessons, writing of chapters for scientific books, scientific papers for renowned journals and conferences, talks at conferences); Management of projects funded by ELT-Elettronica; Proposal of research projects to European FP7 calls (project definition, work plan definition - PERT and GANTT chart, resource assessment, risk assessment, etc.).
- **November 2010 - March 2011:** Research grant (*Assegno di ricerca* Art. 51 c.6 Legge 449 - 27/12/1997) at Information Engineering Department, University of Siena, Italy.  
*Supervisor:* Prof. Mauro Barni

*Topic:* Development of Privacy Preserving algorithms for encrypted signal processing in biometric and biomedical scenarios.

*Activities:* Scientific research; Prototyping and optimization (Matlab); Implementation and testing (C++ and Java); Tutoring of Master students; Dissemination (frontal lessons, writing of scientific papers for renowned journals and conferences, talks at conferences).

- **November, 2009 - April 2010:** Internship at Philips Lab. Eindhoven (Netherlands)

*Activity research:* Privacy Preserving ECG Quality Evaluation

*Supervisor:* Jorge Guajardo Merchan

*Goal:* Development of Privacy Preserving algorithms for remote biomedical (ECG) signal quality evaluation.

*Activities:* Scientific research; Prototyping and optimization (Matlab); Implementation and testing (C++); Dissemination (writing of scientific papers for renowned conferences, talks at conferences).

- **May 2007 - October 2007:** Six months project collaboration contract (Co.Co.Co.) at the Information Engineering Department of the University of Siena, Italy.

*Supervisor:* Prof. Mauro Barni

*Goal:* Development of protocols for compression of encrypted gray-scale images

*Activities:* Scientific research; Prototyping and optimization (Matlab); Implementation and testing (C++); Dissemination (writing of scientific papers published in renowned conferences, talks at conferences); Management of scientific European SPEED project (activity continued during following PhD studies).

## Educational Qualification:

- July 26th, 2018: **Italian National Habilitation as Associate Professors in Computer Engineering** (Abitolazione Scientifica Nazionale a professore II fascia nel settore concorsuale 09/H1 Sistemi di Elaborazione delle Informazioni).

- November 14th, 2012: **Doctor Europaeus (Ph.D.)** at the Information Engineering Department of Siena. *Thesis:* "Privacy Preserving Processing of Biomedical Signals with Application to Remote Healthcare Systems"

*Supervisor:* Prof. Mauro Barni

*Abstract:* To preserve the privacy of patients and service providers in biomedical signal processing applications, particular attention has been given to the use of secure multiparty computation techniques. This thesis focuses on the development of a privacy preserving automatic diagnosis system whereby a remote server classifies a biomedical signal provided by the patient without getting any information about the signal itself and the final result of the classification. Specifically, we present and compare two methods for the secure classification of electrocardiogram (ECG) signals: the former based on **linear branching programs** and the latter relying on **neural networks**. Moreover a protocol that performs a preliminary evaluation of the signal quality is proposed. The thesis deals with all the requirements and difficulties related to working with data that must stay encrypted during all the computation steps. The proposed systems prove that carrying out efficiently complex tasks, like ECG classification and quality evaluation, in the encrypted domain is indeed possible in the semi-honest model, paving the way to interesting future applications wherein privacy of signal owners is protected by applying high security standards.

- First Session 2007: **Qualifying examination for the Engineering profession** - [grade: 103/120] obtained at University of Firenze.

- April 16th, 2007: **Master degree in Computer Science Engineering** - [grade: 110/110 with honors] (Informatic Systems and Applications) obtained at University of Siena.

*Title:* "Lossless coding of encrypted images"

*Supervisor:* Prof. Mauro Barni

- July, 1998: **High school Diploma, specialization in information technology** - [grade 60/60] obtained at ITIS "T. Sarracchi", Siena (SI)

## Participation to Research Projects:

- Security and Privacy of Biometrics for Mobile Authentication (SPoB-MA)

*Principal Investigator*

Sapienza Research Project, Protocol n. RM11715C7878B045

November 2017 – November 2020

- ELT-950 Project. Sponsored by ELT-Elettronica, Roma, Italy

*Researcher; Scientific-Technical Reference* April to December 2011 and April to December 2012

- MIUR (Ministero dell'Università e della Ricerca) "Priv-Ware" Project  
Contract no. 2007JXH7ET (PRIN program 2007)  
Start date: September 1<sup>st</sup>, 2008; Duration: 24 Months  
website: <http://clem.dii.unisi.it/~vipp/projects/prin/>
- European "SPEED" (Signal Processing in the EncryptEd Domain) Project  
Contract no. 034238  
Start date: December 1<sup>st</sup>, 2006; Duration: 36 Months  
Website: [http://cordis.europa.eu/project/rcn/80454\\_en.html](http://cordis.europa.eu/project/rcn/80454_en.html)

## Teaching Experience:

- **Academic year 2017-2018:** Teacher of the course "Sistemi di Calcolo" (SSD ing-inf/05) (Italian language) for the Bachelor Laurea degrees of Science in Engineering in Computer Science and Systems Engineering, University La Sapienza, Italy.
- **Academic year 2017-2018:** Seminars (4 hours) during the course of "Seminars in Advanced Topics in Engineering in Computer Science" (SSD ing-inf/05) (English language) together with Prof. Mecella for the Master Laurea degrees of Science in Engineering in Computer Science and Systems Engineering, Sapienza University of Rome, Italy.
- **Academic year 2016-2017:** Frontal lectures during the course of "Fondamenti di informatica 2" (SSD ing-inf/05) (Principle of Computer Science, Italian Language) together with Proff. D'Amore and De Giacomo for the Bachelor Laurea degrees of Science in Engineering in Computer Science and Systems Engineering, Sapienza University of Rome, Italy.
- **Academic year 2016-2017:** Seminars (3 hours) during the course of "Seminars in Advanced Topics in Engineering in Computer Science" (SSD ing-inf/05) (English language) together with Proff. Baldoni and Mecella for the Master Laurea degrees of Science in Engineering in Computer Science and Systems Engineering, Sapienza University of Rome, Italy.
- **Academic year 2016-2017:** Seminars (3 hours) during the course of "Great Ideas in ICT" (SSD ing-inf/05) (English language) together with Prof. Querzoni for the PhD school in Engineering in Computer Science, Sapienza University of Rome, Italy.
- **Academic year 2016-2017:** Frontal lectures during the course of "Computer and Network Security" (SSD inf/01) (English language) held by Prof. Conti for the MSc Laurea Degrees in Computer Science of the University of Padova, Italy.
- **Academic year 2014-2015:** Tutoring during the course of "Multimedia Security" (SSD ing-inf/03) (English language) held by Prof. Barni for the MSc Laurea Degrees in Electronics and Communications Engineering of the University of Siena, Italy.
- **Academic year 2013-2014:** Tutoring during the course of "Multimedia Security" (SSD ing-inf/03) (English language) held by Prof. Barni for the MSc Laurea Degrees in Electronics and Communications Engineering of the University of Siena, Italy.
- **Academic year 2008-2009:** Tutoring during the course of "Teoria dei Segnali" (SSD ing-inf/03) (Random Signals and Systems, Italian language) held by Prof. Barni for Laurea Degrees in Telecommunication Engineering of the University of Siena, Italy.

## Speaker activities:

- **CyberChallenge.IT 2018:** *Advanced Persistent Threat*, invited speaker
- **Italian Conference on Cybersecurity ITASEC 2018:** *Malware Triage based on Static Features and Public APT Reports*, speaker
- **IEEE Workshop on Information Forensic and Security WIFS 2017:** *It's Always April Fools' Day! On the Difficulty of Social Network Misinformation Classification via Propagation Features*, speaker
- **International Carnahan Conference on Security Technology ICCST 2017:** *Ensuring Information Security by Using Haskell Advanced Type System*, speaker
- **International Symposium on Cyber Security Cryptography and Machine Learning CSCML 2017:** *Building regular registers with rational malicious servers and anonymous clients*, speaker
- **Conference on Decision and Game Theory for Security GameSec 2016:** *Consensus Algorithm with Censored Data for Distributed Detection with Corrupted Measurements: A Game-Theoretic Approach*, speaker
- **2016 SPRITZ Workshop on Future Systems Security and Privacy:** *ODIN: Obfuscation-based*



privacy preserving consensus algorithm for Decentralized Information fusion in smart device Networks, invited speaker

- **2015 SPRITZ Workshop on Future Systems Security and Privacy:** *Computing with private data: when cryptography meets signal processing*, invited speaker
- **IEEE Workshop on Security and Privacy in the Cloud 2015:** *Privacy Preserving Cloud Computing through Piecewise Approximation of Multivariate Functions*, speaker
- **Italian GTTI Multimedia 2015:** *A Marriage between Cryptography and Signal Processing for Biometric Template Protection*, speaker
- **IEEE International Conference on Acoustics, Speech and Signal Processing ICASSP 2014:** *Secure multi-party consensus gossip algorithms*, speaker
- **IEEE Workshop on Information Forensic and Security WIFS 2013:** *Secure Evaluation of Private Functions through Piecewise Linear Approximation*, speaker
- **Springer Workshop on Data Privacy Management DPM 2013:** *Parallel Implementation of GC-Based MPC Protocols in the Semi-Honest Setting*, speaker
- **IEEE Workshop on Information Forensic and Security WIFS 2012:** *General Function Evaluation in a STPC Setting via Piecewise Linear Approximation*, speaker
- **IEEE Workshop on Information Forensic and Security WIFS 2011:** *Division between encrypted integers by means of Garbled Circuits*, speaker
- **IEEE Workshop on Information Forensic and Security WIFS 2010:** *Privacy Preserving Evaluation of Signal Quality With Application to ECG Analysis*, speaker
- **SPEED workshop 2009:** *Combining Signal Processing and Cryptographic Protocol Design for Efficient ECG Classification*, speaker
- **IEEE Workshop on Information Forensic and Security WIFS 2009:** *Efficient privacy-preserving classification of ECG signals*, speaker
- **EURASIP European Signal Processing Conference EUSIPCO 2008:** *Lossless Compression of Encrypted Grey-Level and Color Images*, speaker

## Activities for Scientific Societies:

- Associate Editor of "Elsevier Journal of Information Security and Applications" (from 2016)
- Review Editor of "Frontiers in Big Data" (from 2018)
- Program Co-Chair of "51th IEEE International Carnahan Conference on Security Technologies (ICCST 2017)"
- Expert Reviewer for "Netherlands Organisation for Scientific Research (NWO) -- NSF Privacy in a Cyber Environment (PRICE) call, 2016"
- Workshop chair of
  - "IEEE International Conference on Advanced and Trusted Computing (ATC 2018)"
  - "IEEE International Conference on Advanced and Trusted Computing (ATC 2017)"
- Publication chair of
  - "Workshop on Security for Embedded and Mobile Systems (SEMS 2017)"
  - "10th ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec 2017)"
- Registration Chair of "10th ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec 2017)"
- Local Organization chair of "9th IEEE International Symposium on Intelligent Signal Processing (WISP 2015)"
- TPC Member of
  - "International Symposium on Security and Privacy on Internet of Things (SPIoT 2018)"
  - "IEEE International Symposium on Multimedia (ISM2018)"
  - "Workshop on Security for Embedded and Mobile Systems (SEMS 2017)"
  - "Workshop on Security in Cyber Physical Systems (SecCPS 2017)"
  - "International Conference on Cyber Security (ICCS 2017)"
  - "International Symposium on Security and Privacy on Internet of Things (SPIoT 2017)"
  - "International Conference on Emerging Ubiquitous Systems and Pervasive networks (EUSPN-2017)", security, Privacy and Trust track





- “IEEE International Symposium on Multimedia (ISM2017)”
- Reviewer for several conferences and journals, among which
  - IEEE Transactions on Transactions on Network Science and Engineering (TSNE)
  - IEEE Transactions on Dependable and Secure Computing (TDSC)
  - IEEE Transactions on Information Forensic and Security (TIFS)
  - IEEE Transactions on Multimedia (TMM)
  - IEEE Transactions on Big Data (TBD)
  - IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
  - IEEE Transactions on Sustainable Computing (TSUSC)
  - IEEE Signal Processing Magazine (SPM)
  - IEEE Software
  - EURASIP Journal on Information Security (JIS)
  - EURASIP Journal on Image and Video Processing (JIVP)
  - Elsevier Journal of Biomedical Informatics (JBI)
  - Elsevier Journal of Information Security and Applications (JISA)
  - KSII Transactions on Internet and Information Systems (TIIS)
  - IEEE International Conference on Image Processing (ICIP)
  - IEEE Workshop in Information Forensic and Security (WIFS)
  - IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)

## Membership of Scientific Societies:

- IEEE Senior member
- IEEE Computer Society member
- IEEE Signal Processing Society member
- Italian National Association of Cryptographers “De Componendis Cifris” member

## Awards:

- Recipient of Italian MIUR “Fondo per il finanziamento delle attività base di ricerca” FFABR 2017

## Scientific expertise:

- **Cryptography:** DES, AES, RSA, Elliptic Curve Cryptography, Hash, MAC, Digital Signatures, etc.
- **Security:** Critical Infrastructure security, IoT security, Content Centric Network security, Biometric security, APT Malware analysis
- **Machine Learning and Pattern Recognition:** Neural Networks, Linear Discriminant Analysis, Decision Tree, Linear Branching Programs, Support Vector Machines, Deep Learning, Convolutional Neural Networks, Random Forests
- **Signal Processing in the Encrypted Domain and Secure Multi-Party Computation tools:** Garbled Circuit, Homomorphic Encryption, Fully Homomorphic Encryption, SPDZ, Hybrid Protocols
- **Signal Processing and Information Theory:** Fourier Transform, Data Compression, FIR and IIR filters, Kalman Filter, Low-Density Parity-Check (LDPC) codes, Statistics, Fuzzy Logic, Rate-Distortion Theory
- **Biomedical signals:** ECG and EEG processing principles (filtering, modeling, classification, analysis)
- **Biometric signal analysis:** Iris authentication (iriscode), fingerprint authentication (fingerprint and minutiae), face authentication (eigenfaces), privacy-related aspects, spoofing and anti-spoofing
- **Image Processing:** Principal Component Analysis (PCA), Gabor Filters, Frequency separation, Forensic



## IT Competences:

- *Programming languages*: Assembler, C, C++, Java, Android, Pascal, Python.
- *Scientific Software*: MATLAB/Simulink, Mathematica, ERWin, Derive, OrCad-PSpice, TensorFlow.
- *Other languages*: HTML, LaTeX, SQL, PHP, Oracle, XML.
- *Development environment*: Visual Studio, Eclipse, Borland J-Builder, Dev-C++, C++ Builder, QT Creator, Android Studio.
- *Graphics editing program*: Adobe Photoshop, Corel Draw, 3D Studio MAX, Adobe Premier, Adobe Lightroom.
- *Office Automation*: Microsoft Office, Open Office.
- *Operating Systems*: MS-DOS, Windows, Linux.

## Personal profiles:

- **Project skills**: Planning (Proposal Writing, Workplan, Resource Allocation, Risk Assessment, Pert, Gantt), Management (Organization, Implementation, Team Building, Supervision), Reporting (Deliverables, Result Presentation in Conferences and Journals)
- **Research skills**: Fast Scientific Approach of new Fields, Proposal of Innovative Ideas to the Research Team and in International Projects, Theoretical Analysis, Design, Prototyping, Development, Testing, Dissemination
- **Working skills**: Independently and Team Working, Supervision, Problem Solving, Lateral Thinking, Decision Making, Relational skills, Analytical skills, Detail-oriented

## Languages:

- **Italian**: Mother tongue
- **English**: Fluent  
PET (Preliminary English Test) certified

## Metrics:

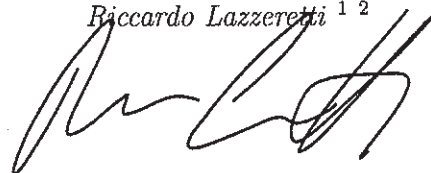
	Products	Citations	H-index
Google Scholar	41	722	11
Scopus	30	383	10
Web of Science	21	90	5

## Personal Interests:

My family, Scientific research, Photography, Reading, Music, Logic games, Cinema.

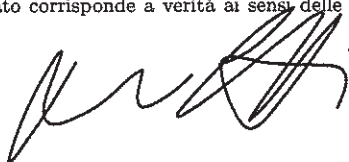
August 23, 2018

Riccardo Lazzeretti <sup>1 2</sup>



<sup>1</sup>Autorizzo il trattamento dei miei dati personali secondo l'art. 13 Dlgs n° 196/2003.

<sup>2</sup>Dichiaro che tutto quanto dichiarato corrisponde a verità ai sensi delle norme in materia di dichiarazioni sostitutive di cui agli artt.46 e seguenti del D.P.R. 445/2000



## Resumé <sup>3</sup>

I got the MSc degree (Laurea) in Computer Science Engineering at the University of Siena in 2007. Then I continued my studies as a Ph.D. under the supervision of Prof. Mauro Barni at the Information Engineering Department of the University of Siena, working on Processing of Encrypted Signals. During Ph.D., from November 2009 to May 2010, I spent six months in Philips Lab at Eindhoven, The Netherlands, under the supervision of Senior Scientist Jorge Guajardo. In 2012 I discussed the Ph.D. thesis. Until October 2015, I continued my research activities as a post-Doc at the Information Engineering and Mathematics Department of the University of Siena in the VIPP (Visual Information Processing and Protection) group, led by Prof. Mauro Barni. In the group I supervised, together with Prof. Barni, the activities of master and PhD students involved in SPED (Signal Processing in the Encrypted Domain) and SMPC (Secure Multi-Party Computation) topics. Together with Prof. Barni, University of Siena, I am continuing the research in privacy preserving biometric authentication, extending it to multi-biometrics.

From November 2015 to January 2016, I've been part of the research team of Cynny s.p.a., an Italian start-up, where I was involved in machine learning problems, such as object recognition, face detection, affective computing. I'm currently broadening my knowledge in the topic, by approaching deep learning and implementing Convolutional Neural Networks with Google's TensorFlow and scikit-learn.


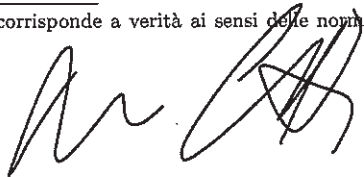
From September 2016 to February 2017, I had a research grant at the University of Padua, Italy, supervised by Prof. Conti. I started several research activities together with Prof. Conti that still are on-going. First of all, together with Scientist Braca of Centre for Maritime Research and Experimentation (CMRE), NATO, we are working on the implementation of privacy preserving consensus algorithm for decentralized Information fusion in Internet of Things. Together with Michele Nati, Digital Catapult, UK, we are exploring Blockchain-based architectures for smart health applications. Together with Dr. Quattrocioni (University of Venezia, Italy), we are working on the possibility of discriminating hoaxes in social networks from the analysis of only structural properties of content propagation cascades. Together with Moreno Ambrosini (Intel Labs, USA) and Prof. Ranise (FBK) we are working on protocols for swarm attestation of IoT devices. Finally together with Alberto Compagno (Cisco, FR) we are working on secure protocols for Content Centric Networks.

From March 2017 I am an Assistant Professor position (RFD-A) at the Sapienza University of Rome, Italy, where I am principally involved in APT malware analysis through machine learning techniques and security and reliability in critical infrastructure.

I participated to many *projects*, cooperating with both academic and industrial partners. The main projects where I was involved are the FP6 European project SPEED ([www.speedproject.eu](http://www.speedproject.eu)), the Italian project priv-WARE, funded by MIUR, and the project ELT-950, sponsored by the Italian company ELT-Elettronica. I got excellent organizational, team-working and leadership skills as well as lateral thinking and problem solving. Thanks to my versatility, I am able to quickly approach new applicative and research fields. I was involved in all the activities related to the projects: scientific approach, project management and deliverable writing. I also have experience in project proposal, having proposed my ideas in several projects submitted to the European community (FP7 and Horizon 2020) and MIUR (PRIN) together with other academic and industrial research centers.

Since July 2018 I am qualified in Italy for the Associate Professors position in Computer Science Engineering.

<sup>3</sup>Dichiaro che tutto quanto dichiarato corrisponde a verità ai sensi delle norme in materia di dichiarazioni sostitutive di cui agli artt.46 e seguenti del D.P.R. 445/2000



## Complete Publications list

- [1] R. Lazzeretti and M. Barni. Lossless Compression of Encrypted Grey-Level and Color Images. *Special session on Signal Processing in the Encrypted Domain, EUSIPCO*, 2008. Citations on Scopus: 34, Scholar: 74, Conference rank (CORE2018): B.
- [2] M. Barni, P. Failla, V. Kolesnikov, R. Lazzeretti, A.R. Sadeghi, and T. Schneider. Secure evaluation of private linear branching programs with medical applications. *European Symposium on Research in Computer Security, ESORICS 2009*, pages 424–439, 2009. Citations on Scopus: 45, Scholar: 94, Web of Science: 16; Acceptance rate: 0.19, Conference rank (CORE2018): A.
- [3] M. Barni, P. Failla, R. Lazzeretti, A. Paus, A.-R. Sadeghi, T. Schneider, and V. Kolesnikov. Efficient privacy-preserving classification of ECG signals. In *IEEE International Workshop on Information Forensics and Security, WIFS 2009*, pages 91–95, 6-9 2009. Citations on Scopus: 15, Scholar: 30; Acceptance rate: 0.30.
- [4] M. Barni, P. Failla, V. Kolesnikov, R. Lazzeretti, A.R. Sadeghi, and T. Schneider. Combining Signal Processing and Cryptographic Protocol Design for Efficient ECG Classification. *SPEED 2009 Workshop co-located with CHES 2009*, page 42, 2009. Citations on Scholar: 1.
- [5] M. Barni, T. Bianchi, D. Catalano, R. Di Raimondo, R. Donida Labati, P. Failla, D. Fiore, R. Lazzeretti, V. Piuri, A. Piva, and F. Scotti. A Privacy-compliant Fingerprint Recognition System Based on Homomorphic Encryption and Fingercodes Templates. In *IEEE International Conference on Biometrics: Theory, Applications and Systems, BTAS 2010*, 2010. Citations on Scopus: 41, Scholar: 81, Conference rank (Qualis): B2.
- [6] M. Barni, T. Bianchi, D. Catalano, R. Di Raimondo, R. Donida Labati, P. Failla, D. Fiore, R. Lazzeretti, V. Piuri, A. Piva, and F. Scotti. Privacy-Preserving Fingercodes Authentication. In *ACM Workshop on Multimedia and Security, MM&Sec 2010*. ACM, 2010. Citations on Scopus: 87, Scholar: 161, Conference rank (CORE2018): B.
- [7] M. Barni, J. Guajardo, and R. Lazzeretti. Privacy Preserving Evaluation of Signal Quality With Application to ECG Analysis. In *IEEE International Workshop on Information Forensics and Security, WIFS 2010*, 2010. Citations on Scopus: 10, Scholar: 12; Acceptance rate: 0.27.
- [8] M. Barni, P. Failla, R. Lazzeretti, A.-R. Sadeghi, and T. Schneider. Privacy-preserving ECG classification with branching programs and neural networks. *IEEE Transactions on Information Forensics and Security*, 6(2):452–468, june 2011. Citations on Scopus: 62, Scholar: 129, Web of Science: 39; JCR Impact Factor 2011: 1.340; SJR 2011: 0.855, Scopus CiteScore 2011: 3.68.
- [9] R. Lazzeretti and M. Barni. Division between encrypted integers by means of garbled circuits. In *IEEE International Workshop on Information Forensics and Security, WIFS 2011*, pages 1–6, 29 2011-dec. 2 2011. Citations on Scopus: 13, Scholar: 13; Acceptance rate: 0.28.
- [10] Y. Luo, S.C. Samson, T. Pignata, R. Lazzeretti, and M. Barni. An Efficient Protocol for Private Iris-Code Matching by Means of Garbled Circuits. In *International Conference on Image Processing (ICIP), Special Session on Emerging Topics in Cryptography and Image Processing*, 2012. Citations on Scopus: 14, Scholar: 21, Web of Science: 5; Acceptance rate: 0.39, Conference Rank(CORE2018): B.
- [11] R. Lazzeretti, J. Guajardo, and M. Barni. Privacy Preserving ECG Quality Evaluation. In *Proceedings of ACM workshop on Multimedia and security, MM&SEC 2012*. ACM, 2012. Citations on Scopus: 6, Scholar: 18; Acceptance rate: 0.48, Conference rank (CORE2018): B.
- [12] T. Pignata, R. Lazzeretti, and M. Barni. General Function Evaluation in a STPC Setting via Piecewise Linear Approximation. In *IEEE International Workshop on Information Forensics and Security, WIFS 2012*. IEEE, 2012. Citations on Scopus: 5, Scholar: 6, Web of Science: 3; Acceptance rate: 0.30.
- [13] R. Lazzeretti. *Privacy Preserving Processing of Biomedical Signals with Application to Remote Healthcare Systems*. PhD thesis, PhD school of the University of Siena, Information Engineering and Mathematical Science Department, November 2012. Tutor: Prof. Mauro Barni, <http://theses.eurasip.org/theses/472/privacy-preserving-processing-of-biomedical/download/> Citations on Scholar: 5.
- [14] R. Lazzeretti and M. Barni. Private Computing with Garbled Circuits [Application Corner]. *IEEE Signal Processing Magazine, Special Issue on Signal Processing in the Encrypted Domain: when Cryptography Meets Signal Processing*, March 2013. Citations on Scopus: 7, Scholar: 10, Web of Science: 5; JCR Impact Factor 2013: 4.481; SJR 2013: 1.631, Scopus CiteScore 2013: 4.77.
- [15] P. Campisi. *Security and Privacy in Biometrics*, chapter Privacy-Aware Processing of Biometric Templates by Means of Secure Two-Party Computation (R. Lazzeretti, P. Failla and M. Barni). Springer, 2013. <http://www.springer.com/us/book/9781447152293>.
- [16] M. Barni, M. Bernaschi, R. Lazzeretti, T. Pignata, and A. Sabellico. Parallel Implementation of GC-Based MPC Protocols in the Semi-Honest Setting. In *International Workshop on Data Privacy Management and Autonomous Spontaneous Security, DPM 2013*. Springer, 2013. Citations on Scopus: 1, Web of Science: 1, Scholar: 9; Acceptance rate: 0.28.
- [17] M. Barni, M. Bernaschi, R. Lazzeretti, T. Pignata, and A. Sabellico. Efficient implementation of garbled circuits for multi-party computation protocols. In *Workshop on Information Privacy and Security, JIPS 2013*, 2013.



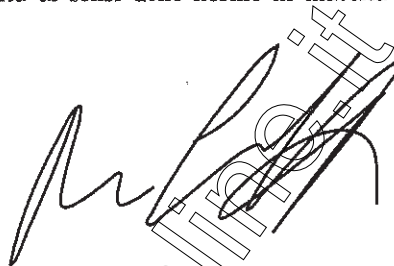


- [18] R. Lazzeretti, T. Pignata, and M. Barni. Secure Evaluation of Private Functions through Piecewise Linear Approximation. In *IEEE International Workshop on Information Forensics and Security, WIFS 2013*. IEEE, 2013. Citations on Scopus: 2, Scholar: 2, Web of Science: 2; Acceptance rate: 0.35.
- [19] R. Lazzeretti, S. Horn, P. Braca, and P. Willett. Secure multi-party consensus gossip algorithms. In *IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2014*, pages 7406–7410. IEEE, 2014. Citations on Scopus: 5, scholar: 6; Acceptance rate: 0.48, Conference rank (Qualis): A1, Conference rank (CORE2018): B.
- [20] G. Droandi and R. Lazzeretti. SHE based non interactive privacy preserving biometric authentication protocols. In *IEEE International Symposium on Intelligent Signal Processing, WISP 2015*, Siena, Italy, May 2015.
- [21] R. Lazzeretti and M. Barni. Privacy preserving classification of ECG signals in mobile e-health applications. In *Aris Gkoulalas Divanis and Grigorios Loukides: Medical Data Privacy Handbook; Springer book*. Springer, 2015. <http://www.springer.com/kp/book/9783319236322>.
- [22] M. Barni, G. Droandi, and R. Lazzeretti. Privacy protection in biometric-based recognition systems: A marriage between cryptography and signal processing. *IEEE Signal Processing Magazine*, 32(5):66–76, Sept 2015. Citations on Scopus: 13, Scholar: 22, Web of Science: 12; JCR Impact Factor 2015: 6.671; SJR 2015: 2.713, Scopus CiteScore 2015: 8.15.
- [23] R. Lazzeretti and T. Pignata. Privacy Preserving Cloud Computing through Piecewise Approximation of Multivariate Functions. In *IEEE Conference on Communications and Network Security, CNS 2015*. IEEE, September 30, 2015. Acceptance rate: 0.27.
- [24] G. Droandi. Non-Interactive Privacy Preserving Protocol for Biometric Recognition Based on Somewhat Homomorphic Encryption. In *European Conference on Cyber Warfare and Security ECCWS*. acpi, 2-3 July 2015. Best PhD paper. Tutors: Riccardo Lazzeretti and Mauro Barni.
- [25] R. Lazzeretti, T. Pignata, and M. Barni. Piecewise function approximation with private data. *IEEE Transactions on Information Forensics and Security*, 11(3):642–657, March 2016. Citations on Scopus: 2, Scholar: 2, Web of Science: 2; JCR Impact Factor(2016): 4.332, SJR (2015): 1.419, Scopus CiteScore 2016:5.81.
- [26] P. Braca, R. Lazzeretti, S. Marano, and V. Matta. Learning with privacy in consensus + obfuscation. *IEEE Signal Processing Letters*, 23(9):1174–1178, 2016. Citations on Scopus: 1, Scholar: 2, Web of Science: 1; JCR Impact Factor 2015: 1.661; SJR 2015: 0.872, Scopus CiteScore 2015: 3.13.
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Dichiaro che tutto quanto dichiarato corrisponde a verità ai sensi delle norme in materia di dichiarazioni sostitutive di cui agli artt.46 e seguenti del D.P.R. 445/2000



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## SHORT BIOGRAPHY OF ANDREA MARRELLA

Andrea Marrella, b. [redacted], is a **research fellow** (scientific disciplinary sector **ING-INF/05**) at Sapienza Università di Roma, Italy, Dipartimento di Ingegneria Informatica, Automatica e Gestionale Antonio Ruberti (DIAG - Department of Computer, Control and Management Sciences and Engineering), since 2013.

He got a **PhD in Engineering in Computer Science** (Dottorato di Ricerca in Ingegneria Informatica) from Sapienza Università di Roma in October 2013. He previously studied Engineering in Computer Science (Ingegneria Informatica) at Sapienza Università di Roma, where he obtained a Bachelor Degree in 2005 and a Master Degree in 2009. Since 2011, he is qualified to practice as Computer Science Engineer (abilitato all'esercizio della professione di Ingegnere).

In 2018, he obtained the **National Scientific Habilitation** (Abilitazione Scientifica Nazionale) as **Associate Professor** for sectors **09/H1** (Sistemi di Elaborazione delle Informazioni) and **01/B1** (Informatica).

### RESEARCH ACTIVITY, KEYNOTES AND INVITED TALKS

Andrea Marrella is affiliated to **DASIlab** (Data and Service Integration Lab) at DIAG. He is a member of the **Data and Service Management research group** and of the **Human-Computer Interaction research group**. His overall research activity has been carried out in Rome (Italy), Tartu (Estonia), and Toronto (Canada).

The **research activity** of Andrea Marrella concerns **theoretical, methodological, and practical aspects** in different areas of **Computer Science**, including Business Process Management, Modelling, Adaptation, Mining and Resilience, Cyber-Security and Human-Computer Interaction. Such topics are challenged in the application domains of smart manufacturing, healthcare, emergency management and cultural heritage.

Since 2010, Andrea Marrella has developed a **research program** aimed at investigating how to integrate the solid theoretical foundations provided by **Automated Planning** and **Reasoning about actions techniques** in **Artificial Intelligence (AI)** with the practical needs required by **Business Process Management (BPM)** solutions. Thanks to the recognized results of his research, he is **actually considered as one of the pioneers** of the concrete application of AI techniques to untangle complex challenges from the BPM domain, such as the **automated synthesis of process models**, the **automated adaptation of running processes** and the **optimal alignment of execution traces** against their underlying (procedural or declarative) process models.

For this reason, in 2017 he was invited to give the **keynote talk** at the **1st International Workshop on BP Innovation with AI (BPAl'17)** organized within the 15<sup>th</sup> International Conference on Business Process Management (BPM 2017 - GII-GRIN Class A - CORE Class A), where he presented (as a single author) his research on "*What Automated Planning can do for Business Process Management*".

In addition, he was invited to present the **results of his research at various institutions worldwide**, including University of Toronto (Canada) and York University (Canada) in 2012, Ryerson University (Canada) in 2013, University of Vienna (Austria) and University of Ulm (Germany) in 2014, and University of Tartu (Estonia) in 2016. Finally, he was invited to organize and give a **full-day tutorial on Process Mining** at 18th International Conference on Product-Focused Software Process Improvement (PROFES 2017).

From 2006 to 2010, the research of Andrea Marrella focused on realizing **advanced methodologies and tools** in the field of Human-Computer Interaction (HCI). Specifically, he designed and developed **innovative touch-based graphical user interfaces for pen-based mobile devices** (notice that touch-based interaction for



mobile devices started to become popular since late 2008 with the mass production of iPhone 3G) and the realization of **advanced workflow engines** and **location-based services** for supporting collaborative work of human operators on-the-field in emergency/disaster scenarios.

His **current research** on HCI tackles a well-known (unsolved) challenge in this area, namely the **automated quantification of learnability of interactive systems**. In this direction, he is focusing on developing a **theoretical and practical framework that exploits Process Mining algorithms and technologies to automatically derive the learnability of a system** during its daily use. The **impact** of this research, which requires a strong background and expertise in BPM and HCI, is potentially **ground-breaking** in the HCI field, as it aims at superseding the expensive and time-consuming learnability techniques for observing users in highly controlled environments over extended periods of time. The **long-term objective** is to realize **explainable and adaptive interactive systems**, which allow one to **automatically extract and understand the behaviours and the characteristics of users** that interact with such systems, thus enabling more precise **user profiling and modelling** that will be used as the basis for any **adaptive change to the system's behaviour towards the user's specific needs**.

In 2018, Andrea Marrella contributed to the writing of the second edition of the **white book on the future of cyber-security in Italy**. In this context, his **current research** on cyber-security is focused, on the one hand, on exploiting **Process Mining techniques** to the **detection of anomalous behaviours and prediction of security issues** in information systems. On the other hand, he is investigating user-centred solutions for tackling the **human factors in cyber-security**, in order to **increase cyber-awareness and reduce human errors**, which are often the cause of security breaches.

## SCIENTIFIC PUBLICATIONS

Since 2007, Andrea Marrella regularly **publishes the results of his research** in top-level international journals and conferences. Notably, since 2013, he has increasingly established his **scientific independence** by authoring papers presented in collaboration with different authors than the supervisor. Overall, he has co-authored **56 peer-reviewed scientific papers** on the above research topics, including:

- **11 journal articles**, including high impact factor journals such as ACM Transactions on Intelligent Systems and Technology, IEEE Transactions on Data and Knowledge Engineering, Expert Systems with Applications (Elsevier), Journal on Data Semantics (Springer), Journal on Software and Systems Modeling (SoSyM), IEEE Internet Computing;
- **2 authored book chapters** on the topics of Process Adaptation in cyber-physical domains and Process Resilience of data-aware business processes;
- **43 workshop and conference papers**, including several class A\*/A conferences (according to the well-known GII-GRIN and CORE rankings) such as DIS in 2018, ICSOC in 2018 and 2014, ICAPS in 2018 and 2016, AAI and CAISE in 2017, BRM in 2017, 2015 and 2011, IJCAI in 2016, KR in 2014 and CoopIS in 2012.

His Google Scholar profile reports an **h-index of 16** and an **i10-index of 21**, with **684 overall citations** (cf. <https://scholar.google.com/citations?user=8zZvFawAAAAJ&hl=en>).

## SCIENTIFIC AWARDS

In 2017, Andrea Marrella received the **Best Paper Award** at the prestigious **CAISE 2017** conference (29th International Conference on Advanced Information Systems Engineering – GII-GRIN Class A - CORE Class A) for his paper on “Multi-party Business Process Resilience By-Design: A Data-centric Perspective”.

## RESEARCH STAYS AND VISITS

From **January 2012 to June 2012**, Andrea Marrella has been a **visiting Researcher** at **York University** in Toronto, Ontario (Canada), Department of Computer Science and Engineering, where he collaborated with Prof. Yves Lespérance to the realization of advanced methodologies and techniques for the automated generation of business process models using partial-order planning algorithms.



From **June 2013 to August 2013**, he has been a **visiting researcher** at **Ryerson University** in Toronto, Ontario (Canada), Department of Computer Science, where he collaborated with Prof. Mikhail Soutchanski to the formalization of an innovative approach based on action formalisms in Knowledge Representation and Reasoning for the automated synthesis of chemical processes in organic chemistry.

In **October and November 2016**, he has been a **visiting researcher** at **University of Tartu** in Estonia. During this period abroad, he collaborated with Prof. Marlon Dumas to the realization of an evaluation framework and of a benchmark to compare process discovery algorithms. Furthermore, he collaborated with Prof. Fabrizio Maria Maggi on the formalization and implementation of a technique based on finite-state automata manipulation and on Automated Planning for efficiently solving the trace alignment problem of declarative processes in Process Mining.

## PROJECTS

Andrea Marrella is the **principal investigator** of the research project (progetto di Avvio alla Ricerca) DAKIP (*"Data-aware Adaptation of Knowledge-intensive Processes in Cyber-Physical Domains through Action-based Languages"*), which has been financed by Sapienza Università di Roma in 2016.

Moreover, he is/has been **actively involved** in several research projects, including WORKPAD (FP6 European Project) and the Italian projects MAIS, TESTMED, SUPER, FIGO (as Unit Leader), NEPTIS (as OR Leader), IT-SHIRTS (as WP Leader), FILIERASICURA and ACI-I.

## TEACHING EXPERIENCE

Andrea Marrella has an **excellent teaching experience**. Within Sapienza, he is the **main lecturer** (docente a contratto) of the graduate course of **Enterprise Information Systems** (ING/INF 05 – 6 CFU – semester Spring 2018). Over the years, he has taught as **main lecturer** the graduate course of **Interaction Design** (ING/INF 05 – 6 CFU – semester Spring 2017) and the undergraduate course of **Databases** (ING/INF 05 – 3 CFU – semester Spring 2014). In Fall 2017, he has taught as **main lecturer** the PhD course of **Process Mining** (3 CFU).

Since 2009, he has been teaching assistant for the undergraduate course of **Databases** (Spring 2009, 2010, 2011, 2013, 2015, 2016). Furthermore, he gave several seminars and lectures for the following graduate courses: **Process and Service Modeling and Analysis** (Spring 2016, 2017, 2018), **Great Ideas in ICT** (Spring 2017), **Human-Computer Interaction** (Spring 2010, 2011, 2016, 2017, 2018), **Seminars in Software and Services for the Information Society** (Spring 2012, 2013, 2014, 2015, 2016), **Reasoning about Actions in Cognitive Robotics** (module of Elective in Artificial Intelligence, Spring 2018).

Andrea Marrella has also a **wide experience as a lecturer for industries and companies**. He taught the course of **Process Simulation and Mining** at NESEA in 2015, and the course of **Human-Machine Interaction** at Cineca in 2016 and at SELEX (now incorporated with Leonardo/Finmeccanica) in 2010 and 2012. Finally, he was **lecturer** for the course of **Databases** (Basi di Dati) at Meschini Institute in 2011, in the range of IFTS - Istruzione e Formazione Tecnica Superiore (Higher technical education and training) teaching program financed by Regione Lazio.

## SUPERVISION OF STUDENTS

Since 2010, within DIAG, Andrea Marrella **supervised and co-supervised**:

- **3 M.sc. student** and **27 B.sc. students** in Engineering in Management Science on the topics of process modelling, process automation, process identification, process simulation, process choreography design, data quality and big data management through NoSQL technologies.
- **11 M.sc. students** and **1 B.sc. student** in Engineering in Computer Science on the topics of software learnability, user experience design, conformance checking, process mining on databases, process repair, process adaptation and process resilience in cyber-physical and IoT-based environments.

Moreover, he co-supervised **2 M.sc theses** in Computer Science for Software Engineering at the University of Tartu (Estonia) on the topics of process discovery and adaptation. Notably, the majority of his M.sc. students



completed their degree with the highest honours, and **9 of them published the results of their thesis** in international-peer-reviewed scientific journals, conferences and workshops.

Since 2017, he is **co-supervising 1 PhD Student** at DIAG on the topic of discovering, formalizing and evaluating user profiling and interactions in IoT-based smart environments.

## PROFESSIONAL SERVICE

Andrea Marrella serves/has served regularly as a **reviewer for top class journals**, such as ACM Transactions on Computer-Human Interaction (TOCHI), IEEE Transactions on Knowledge and Data Engineering (TKDE), IEEE Transactions on Human-Machine Systems (SMC), IEEE Transactions on Service Computing (TSC), Information Systems, Data & Knowledge Engineering (DKE), Journal of Artificial Intelligence Research (JAIR), Journal on Data Semantics (JODS), Business & Information Systems Engineering (BISE).

Moreover, in 2018 he is acting as **expert reviewer** for the **Discovery Grant Program** financed by **Natural Sciences and Engineering Research Council of Canada**.

Since 2017, Andrea Marrella is the **Information Director** of the **ACM Journal on Data Quality** (ISSN 1936-1955) and is **member of the Editorial Board** of the **International Journal of Information Systems for Crisis Response and Management** (ISSN 1937-9390).

He serves/has served in the **Program Committee** of the 34th ACM/SIGAPP Symposium On Applied Computing (SAC 2019), 16<sup>th</sup> Int. Conference on Business Process Management (BPM 2018), 14<sup>th</sup> Int. Conference on Advanced Visual Interfaces (AVI 2018), 2017 and 2018 Int. Conference on Software and System Processes (ICSSP 2017 and 2018), 17th Int. Conference of the Italian Association for Artificial Intelligence (AI\*IA 2018), 12<sup>th</sup>, 13<sup>th</sup>, 14<sup>th</sup> Int. Conference on Web Information Systems and Technologies (WEBIST 2016, 2017 and 2018), 14<sup>th</sup> Int. Conference on Intelligent Environments (IE'18), 2014 Symposium on Computational Intelligence and Data Mining (CIDM 2014) and of several international workshops.

As far as **organization** and **chairship** of conferences and **workshops**, Andrea Marrella has acted/is acting as:

- Organization Chair of the 31st Int. Conf. on Advanced Information Systems Engineering (CAISE 2019)
- Demo & Poster Chair of the 14th ACM Int. Conf. on Advanced Visual Interfaces (AVI 2018)
- Local Chair of the 8th IEEE Int. Conf. on Service Oriented Computing & Applications (SOCA 2015)
- Proceedings Chair of the 23rd Italian Symposium on Advanced Database Systems (SEBD 2015)
- Publicity Chair of the 12th Int. Conf. on Mobile Web and Intelligent Inf. Systems (MobiWis 2015)
- PC Chair of the 2nd Int. W/shop on Knowledge-intensive Business Processes (KiBP 2013)
- Proceedings Chair of the 1st Int. W/shop on Knowledge-intensive Business Processes (KiBP 2012)





# ANDREA MARRELLA CURRICULUM VITAE

## Part I – General Information

Full Name
Date of Birth
Place of Birth
Citizenship
Permanent Address
Mobile Phone Number
E-mail
Spoken Languages

## Part II – Education

### (II A) – Academic Achievements

Type	Year	Institution	Notes
National Scientific Habilitation	2018	MIUR - Ministero dell'Istruzione, dell'Università e della Ricerca	<u>National Scientific Habilitation</u> (Abilitazione Scientifica Nazionale) as Associate Professor for <u>sector 09/H1</u> (Sist. di Elaborazione delle Informazioni)
National Scientific Habilitation	2018	MIUR - Ministero dell'Istruzione, dell'Università e della Ricerca	<u>National Scientific Habilitation</u> (Abilitazione Scientifica Nazionale) as Associate Professor for <u>sector 01/B1</u> (Informatica)
PhD	2013	Sapienza Università di Roma	<u>PhD</u> in Engineering in Computer Science (Cycle XXV). <u>PhD Thesis</u> : "SmartPM: Automatic Adaptation of Dynamic Processes at Run-Time". <u>Advisor</u> : Prof. Massimo Mecella
Licensure in Engineering	2011	Sapienza Università di Roma	<u>National qualification</u> to practice as a Computer Science Engineer. <u>Final mark</u> : 193/240
University graduation	2009	Sapienza Università di Roma	<u>Master Degree</u> in Engineering in Computer Science. <u>Final mark</u> : 110/110. <u>Master Thesis</u> : "User-Centered Design Methodologies. The Approach and the Case of the WORKPAD project". <u>Advisor</u> : Prof. Massimo Mecella



University graduation	2005	Sapienza Università di Roma	<u>Bachelor Degree</u> in Engineering in Computer Science. <u>Final mark</u> : 107/110. <u>Bachelor Thesis</u> : "An Environment for the Automatic Generation of User Interfaces". <u>Advisor</u> : Prof. Giuseppe Santucci
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## (II B) – Participation to PhD Schools

Type	Year	Institution	Notes
PhD School	2016	Sapienza Università di Roma	<u>User eXperience (UX) Boot Camp</u> : Analysis of UX Methods, Metrics and Analysis. <u>Course Leader</u> : Prof. Jeff Sauro, University of Denver, Colorado, USA.
PhD School	2010	University of Rostock, Germany	<u>Advanced Course on Petri Nets – Introduction to Theory and Applications and State of the Art in Petri Nets</u> . <u>Course Leader</u> : Prof. Wil van der Aalst, Technical University of Eindhoven, the Netherlands.
PhD School	2010	BiCi (Bertinoro international Center for informatics), University of Bologna, Italy	<u>Course 1: Learning Theory: Statistical and Game-Theoretic Foundations</u> , <u>Course Leader</u> : Prof. Nicolò Cesa-Bianchi, University of Milan, Italy. <u>Course 2: Foundations of Advanced Networking</u> , <u>Course Leader</u> : Prof. Francesco Lo Presti, Università di Roma Tor Vergata, Italy.

## Part III – Appointments

### (III A) – Academic Appointments

Start	End	Institution	Contract/Grant <sup>1</sup>	Position
01/11/2013	present	Dipartimento di Ingegneria Informatica, Automatica e Gestionale, Sapienza Università di Roma	C4, C5, C6, C7, C8	<b>Research fellow</b> in the DASILab group. <u>Research topics</u> : Business Process Management (BPM), Modeling, Adaptation, Mining and Resilience, Cyber-Security, Automated Planning and Reasoning about actions applied to BPM; Human-Computer Interaction.

<sup>1</sup> For each Academic Appointment, the associated contracts or research grants are listed in Section (III B).

01/11/2009	31/10/2013	Dipartimento di Ingegneria Informatica, Automatica e Gestionale, Sapienza Università di Roma	C3, C4	<p><b>PhD Student</b> under the supervision of Prof. Massimo Mecella.</p> <p><u>Research topics:</u> Business Process Management (BPM) and Adaptation; Automated Planning and Reasoning about actions applied to BPM; ICT solutions for healthcare and emergency management; Human-Computer Interaction.</p>
25/10/2016	12/11/2016	Institute of Computer Science, University of Tartu (Estonia)	---	<p><b>Visiting Researcher</b> at University of Tartu (Estonia). Invited by Prof. Marlon Dumas and Dr. Fabrizio Maria Maggi.</p> <p><u>Research topics:</u> Automated Planning applied to Process Mining.</p>
25/06/2013	14/08/2013	Department of Computer Science at Ryerson University in Toronto, Ontario (Canada)	---	<p><b>Visiting Researcher</b> at Ryerson University in Toronto, Ontario (Canada). Invited by Prof. Mikhail Soutchanski.</p> <p><u>Research topics:</u> Reasoning about actions and Automated Planning techniques applied to the synthesis of chemical processes.</p>
14/01/2012	07/06/2012	Department of Computer Science and Engineering at York University in Toronto, Ontario (Canada)	---	<p><b>Visiting Researcher</b> at York University in Toronto, Ontario (Canada). Invited by Prof. Yves Lespérance.</p> <p><u>Research topics:</u> Reasoning about actions and Automated Planning techniques applied to the generation of business process models.</p>

01/08/2007	31/10/2008	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	C2	Research Assistant for the FP6 EU Project WORKPAD under the supervision of Prof. Tiziana Catarci. <u>Research activities:</u> Design of usability tests and implementation of a process management system for mobile devices.
07/11/2006	30/04/2007	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	C1	Research Assistant for the FP6 EU Project WORKPAD under the supervision of Prof. Tiziana Catarci. <u>Research activities:</u> User requirements elicitation. Analysis and design of the graphical user interface of the system developed within the project.

### (III B) – Contracts and Research Grants

ID	Start	End	Duration	Institution	Contract Type
C1	01/11/2006	30/04/2007	6 months	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	Fixed term contract (Collaborazione Coordinata e Continuativa)
C2	01/08/2007	31/10/2008	15 months	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	Fixed term contract (Collaborazione Coordinata e Continuativa)
C3	01/11/2009	31/10/2012	36 months	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	PhD Research Grant (Borsa di Studio di Dottorato)
C4	01/11/2012	31/05/2014	18 months (12 out of 18 months were benefited during the PhD)	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	Research Grant (Assegno di Ricerca)

C5	01/06/2014	30/06/2016	25 months	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	Research Grant (Assegno di Ricerca)
C6	01/07/2016	31/12/2016	6 months	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	Research Scholarship (Borsa di Studio)
C7	01/01/2017	31/12/2017	12 months	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	Research Grant (Assegno di Ricerca)
C8	01/01/2018	31/12/2018 (expected)	12 months	Dipartimento di Ingegneria Informatica, Automatica e Gestionale of Sapienza Università di Roma	Research Grant (Assegno di Ricerca)

## Part IV – Teaching experience

### (IV A) – Teaching in Academia

Year	Institution	Lecture/Course
2017/2018	Sapienza Università di Roma M.Sc. in Engineering in Management Science	Lecturer (Docente a contratto) of the course “ <b>Sistemi Informativi Aziendali</b> ” (Enterprise Information Systems – ING/INF 05 – 6 CFU).
2017/2018	Sapienza Università di Roma PhD program in Computer Science and Engineering	Lecturer (Docente) of the course “ <b>Process Mining</b> ” (ING/INF 05 – 3 CFU).
2016/2017	Sapienza Università di Roma M.Sc. in Design, Multimedia and Visual Communication	Lecturer (Docente a contratto) of the course “ <b>Ambienti Virtuali Interattivi</b> ” (Interaction Design – ING/INF 05 – 6 CFU).
2013/2014	Sapienza Università di Roma B.Sc. in Engineering in Management Science	Lecturer (Docente a contratto) of the course “ <b>Basi di Dati</b> ” (Databases - ING-INF/05 - 3 CFU).
2010/2011	Sapienza Università di Roma B.Sc. in Engineering in Management Science	Teaching assistant (Tutor) of the course “ <b>Basi di Dati</b> ” (Databases - ING-INF/05 - 6 CFU). Course Leader: Prof. Tiziana Catarci



2009/2010	Sapienza Università di Roma B.Sc. in Engineering in Management Science	Teaching assistant (Tutor) of the course “ <b>Basi di Dati</b> ” (Databases - ING-INF/05 - 6 CFU). Course Leader: Prof. Tiziana Catarci
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**(IV B) – Lectures and specialized seminars in Academia**

Year	Institution	Lecture/Course
2017/2018	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Lecture</b> (1 talk on Conformance Checking, for 4 <i>academic hours</i> ) for the course of “ <b>Process and Service Modeling and Analysis</b> ” (ING-INF/05 - 6 CFU). Course Leader: Prof. Massimo Mecella
2017/2018	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Lecture</b> (1 talk on Technologies for Automated Planning, for 2 <i>academic hours</i> ) for the course of “ <b>Reasoning about Action in Cognitive Robotics</b> ” (ING-INF/05 - 6 CFU). Course Leader: Prof. Giuseppe De Giacomo
2017/2018	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Specialized Seminars</b> (3 talks on mining user interactions and advanced prototyping techniques for designing user interfaces for mobile devices, for 8 <i>academic hours</i> ) for the course of “ <b>Human-Computer Interaction</b> ” - ING-INF/05 - 6 CFU). Course Leader: Prof. Tiziana Catarci
2016/2017	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Lecture</b> (1 talk on Process Mining: Analytics applied to Workflow, for 4 <i>academic hours</i> ) for the course of “ <b>Great Ideas in ICT</b> ” (ING-INF/05 - 3 CFU). Course Organizer: Prof. Leonardo Querzoni
2016/2017	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Lectures</b> (8 talks on Business Process Modeling, Automation and Execution and Process Mining against declarative processes, for 16 <i>academic hours</i> ) for the course of “ <b>Process and Service Modeling and Analysis</b> ” (ING-INF/05 - 6 CFU). Course Leaders: Prof. Giuseppe De Giacomo and Prof. Massimo Mecella
2016/2017	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Specialized Seminars</b> (2 talks on advanced prototyping techniques for designing user interfaces for mobile devices, for 5 <i>academic hours</i> ) for the course of “ <b>Human-Computer Interaction</b> ” - ING-INF/05 - 6 CFU). Course Leader: Prof. Tiziana Catarci

2015/2016	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Lectures (8 talks</b> on Business Process Modeling, Automation and Execution and Process Mining against declarative processes, for <i>16 academic hours</i> ) for the course of <b>"Process and Service Modeling and Analysis"</b> (ING-INF/05 - 6 CFU). <u>Course Leaders:</u> Prof. Giuseppe De Giacomo and Prof. Massimo Mecella
2015/2016	Sapienza Università di Roma B.Sc. in Engineering in Management Science	<b>Lectures (for 20 academic hours)</b> for the course of <b>"Basi di Dati"</b> (Databases - ING-INF/05 - 6 CFU). <u>Course Leader:</u> Prof. Tiziana Catarci
2015/2016	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Specialized Seminars (2 talks</b> on Business Process Modeling, Adaptation and Execution, for <i>4 academic hours</i> ) for the course of <b>"Seminars in Software and Services for the Information Society"</b> (ING-INF/05 - 6 CFU). <u>Course Leader:</u> Prof. Massimo Mecella
2015/2016	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Specialized Seminar (1 talk</b> on the design and evaluation of the user-centered methodology employed in the FP6 project WORKPAD, for <i>2 academic hours</i> ) for the course of <b>"Human-Computer Interaction"</b> - ING-INF/05 - 6 CFU). <u>Course Leader:</u> Prof. Tiziana Catarci
2014/2015	Sapienza Università di Roma B.Sc. in Engineering in Management Science	<b>Lectures (for 20 academic hours)</b> for the course of <b>"Basi di Dati"</b> (Databases - ING-INF/05 - 6 CFU). <u>Course Leader:</u> Prof. Tiziana Catarci
2014/2015	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Lectures (5 talks</b> on Foundations of Process Modeling with Petri Nets, Business Process Modeling, Simulation, Management, Adaptation and Execution, for <i>20 academic hours</i> ) for the course of <b>"Seminars in Software and Services for the Information Society"</b> (ING-INF/05 - 6 CFU). <u>Course Leader:</u> Prof. Massimo Mecella
2013/2014	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Lectures (3 talks</b> on Foundations of Process Modeling with Petri Nets, Business Process Modeling and Management, for <i>12 academic hours</i> ) for the course of <b>"Seminars in Software and Services for the Information Society"</b> (ING-INF/05 - 6 CFU). <u>Course Leader:</u> Prof. Umberto Nanni
2012/2013	Sapienza Università di Roma B.Sc. in Communications Engineering	<b>Lectures (for 20 academic hours)</b> for the course of <b>"Basi di Dati"</b> (Databases - ING-INF/05 - 5 CFU). <u>Course Leader:</u> Prof. Silvio Salza

2012/2013	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Specialized Seminars (2 talks</b> on Business Process Modeling and Management, for <i>8 academic hours</i> ) for the course of <b>"Seminars in Software and Services for the Information Society"</b> (ING-INF/05 - 6 CFU). <b>Course Leader:</b> Prof. Umberto Nanni
2011/2012	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Specialized Seminars (2 talks</b> on Business Process Modeling and Management, for <i>8 academic hours</i> ) for the course of <b>"Seminars in Software and Services for the Information Society"</b> (ING-INF/05 - 6 CFU). <b>Course Leader:</b> Prof. Umberto Nanni
2010/2011	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Specialized Seminars (2 talks</b> on the design and evaluation of the user-centered methodology employed in the FP6 Project WORKPAD, for <i>8 academic hours</i> ) for the course of <b>"Human-Computer Interaction"</b> (Interazione Persona-Calcolatore - ING-INF/05 - 6 CFU). <b>Course Leader:</b> Prof. Tiziana Catarci
2009/2010	Sapienza Università di Roma M.Sc. in Computer Science and Engineering	<b>Specialized Seminars (2 talks</b> on the design and evaluation of the user-centered methodology used for the FP6 Project WORKPAD, for <i>8 academic hours</i> ) for the course of <b>"Human-Computer Interaction"</b> (Interazione Persona-Calcolatore - ING-INF/05 - 6 CFU). <b>Course Leader:</b> Prof. Tiziana Catarci
2008/2009	Sapienza Università di Roma B.Sc. in Engineering in Management Science	<b>Lectures (for 20 academic hours)</b> for the course of <b>"Basi di Dati"</b> (Databases - ING-INF/05 - 6 CFU). <b>Course Leader:</b> Prof. Tiziana Catarci

#### (IV C) –Teaching in Industry

Start	End	Institution	Lecture/Course
04/05/2010	05/05/2010	CINI - Consorzio Interuniversitario Nazionale per l'Informatica. Via Salaria 113, 00185 Rome (Italy)	<b>Lecturer (Docente a contratto)</b> for the course <b>"Human-Machine Interaction"</b> , held for SELEX - Sistemi Integrati (now incorporated with Leonardo/Finmeccanica <sup>2</sup> ). SELEX is a company that designs and develops systems for Homeland Protection, systems and radar for air defense.

<sup>2</sup> <http://www.leonardocompany.com/en>

01/01/2011	30/07/2011	Istituto G. Meschini. Viale Giotto 1, 00153 Rome (Italy)	<b>Lecturer</b> (Docente a contratto) for the course of “ <b>Basi di Dati</b> ” (Databases) for the Meschini Institute. The course was held in the range of the IFTS - Istruzione e Formazione Tecnica Superiore (Higher technical education and training) courses.
02/10/2012	03/10/2012	CINI - Consorzio Interuniversitario Nazionale per l'Informatica. Via Salaria 113, 00185 Rome (Italy)	<b>Lecturer</b> (Docente a contratto) for the course “ <b>Human-Machine Interaction</b> ”, held for SELEX - Sistemi Integrati (now incorporated with Leonardo/Finmeccanica). SELEX is a company that designs and develops systems for Homeland Protection, systems and radar for air defense, battlefield management, etc.
13/10/2015	15/10/2015	NESEA. via Flavio Domiziano 10, 00145 Rome (Italy)	<b>Lecturer</b> (Docente a contratto) for the course “ <b>Process Simulation and Mining</b> ”, held for NESEA <sup>3</sup> . Nesea is an Italian consulting ICT company.
25/02/2016	03/03/2016	Consorzio Interuniversitario CINECA. via Magnanelli 6/3, 40033 Casalecchio di Reno, Bologna (Italy)	<b>Lecturer</b> (Docente a contratto) for the course of “ <b>Human-Computer Interaction</b> ”, held for CINECA <sup>4</sup> . CINECA is a non-profit consortium, made up of 70 Italian universities, four national research centers, and the Ministry of Universities and Research (MIUR), which aims at supporting the Italian scientific community through supercomputing and scientific visualization tools.

#### (IV D) – Supervision of students

Since 2010, within DIAG, Andrea Marrella **supervised** and **co-supervised**:

- **3 M.sc. student** and **27 B.sc. students** in Engineering in Management Science on the topics of process choreography design, data quality and big data management through NoSQL technologies.
- **11 M.sc. students** and **1 B.sc. student** in Engineering in Computer Science on the topics of software learnability, conformance checking, process mining on databases, process repair, process adaptation and process resilience in cyber-physical and IoT-based environments.

Moreover, he co-supervised **2 M.sc theses** in Computer Science for Software Engineering at the University of Tartu (Estonia) on the topics of process discovery and adaptation. Notably, the majority of his M.sc. students completed their degree with the highest honours and **9 of them published the results of their thesis** in international peer-reviewed scientific journals, conferences and workshops (see below for more details).

<sup>3</sup> <http://www.nesea.it/>

<sup>4</sup> <https://www.cineca.it/en>



- A. Augusto, R. Conforti, M. Dumas, M. La Rosa, F. Maria Maggi, **A. Marrella**, M. Mecella, **A. Soo (M.sc. student)**. *Automated Discovery of Process Models from Event Logs: Review and Benchmark*. IEEE Transactions on Knowledge and Data Engineering (TKDE, IEEE, ISSN: 1041-4347), 2018
- F. M. Maggi, **A. Marrella**, **G. Capezzuto (M.sc. student)**, Abel Armas Cervantes. *Explaining Non-Compliance of Business Process Models through Automated Planning*. In: 16th Int. Conf. on Service-Oriented Computing (ICSOC 2018), Springer, Hangzhou, Zhejiang, China, 12-15 November 2018
- M. de Leoni, **G. Lanciano (M.sc. student)**, **A. Marrella**. *Aligning Partially-Ordered Process-Execution Traces and Models Using Automated Planning*. In: 28th Int. Conf. on Automated Planning and Scheduling (ICAPS 2018), AAAI Press, Delft, the Netherlands, 24-29 June 2018
- F. Leotta, **A. Marrella**, M. Mecella, **F. Palucci (M.sc. student)**, **C. Seri (M.sc. student)**, T. Catarci. *Encouraging persons to visit cultural sites through mini-games*. In: EAI Endorsed Transactions on Serious Games, Volume 18, Issue 14, EAI, January 2018
- M. de Leoni, **G. Lanciano (M.sc. student)**, **A. Marrella**. *A Tool for Aligning Event Logs and Prescriptive Process Models through Automated Planning*. In: 15th Int. Conf. on Business Process Management (BPM 2017), Demo Track, CEUR Workshop Proceedings (Volume 1920), Barcelona, Spain, 10-15 September 2017
- **T. Collerton (M.sc. student)**, **A. Marrella**, M. Mecella, T. Catarci. *Route Recommendations to Business Travelers Exploiting Crowd-Sourced Data*. In: 14th Int. Conf. on Mobile Web and Intelligent Information Systems (MobiWIS 2017), Springer Int. Publishing, Prague, Czech Republic, 21-23 August 2017
- **O. Hanteer (M.sc. student)**, **A. Marrella**, M. Mecella, T. Catarci. *A Petri-Net Based Approach to Measure the Learnability of Interactive Systems*. In: 13th Int. Conf. on Advanced Visual Interfaces (AVI 2016), ACM, Bari, Italy, 7-10 June 2016
- **A. Marrella**, **P. Halapuu (M.sc. student)**, M. Mecella, S. Sardina. *Automated Process Adaptation in Cyber-Physical Domains with the SmartPM System*. In: 8th Int. Conf. on Service-Oriented Computing and Applications (SOCA 2015), IEEE, Rome, Italy, 19-21 October 2015
- **A. Marrella**, **P. Halapuu (M.sc. student)**, M. Mecella, S. Sardina. *SmartPM: An Adaptive Process Management System for Executing Processes in Cyber-Physical Domains*. In: 13th Int. Conf. on Business Process Management (BPM 2015), Demo Track, CEUR Workshop Proceedings (Volume 1418), Innsbruck, Austria, 31 August - 3 September 2015
- **F. Cossu (M.sc. student)**, **A. Marrella**, M. Mecella, A. Russo, S. Kimani et al. *Supporting Doctors through Mobile Multimodal Interaction and Process-aware Execution of Clinical Guidelines*. In: 7th Int. Conf. on Service Oriented Computing & Applications (SOCA 2014), IEEE, Matsue, Japan, 17-19 November 2014
- **F. Cossu (M.sc. student)**, **A. Marrella**, M. Mecella, A. Russo, G. Bertazzoni, M. Suppa, F. Grasso. *Improving Operational Support in Hospital Wards through Vocal Interfaces and Process-Awareness*. In: 25th Int. Symposium on Computer-Based Medical Systems (CBMS 2012), IEEE, Rome, Italy, 20-22 June 2012

Finally, since 2017, Andrea Marrella is **co-supervising 1 PhD Student** at DIAG (Francesco Sapio) on the topic of discovering, formalizing and evaluating user profiling and interactions in IoT-based smart environments.





## Part V – Scientific Awards and Society Memberships

Year	Title
2017	<b>Best Paper Award</b> at the prestigious <b>CAISE 2017</b> conference (29th International Conference on Advanced Information Systems Engineering – GII-GRIN Class A - CORE Class A) for the paper: "Multi-party Business Process Resilience By-Design: A Data-centric Perspective".
2013-2018	Member of the Italian Association for Artificial Intelligence (AI*IA).

## Part VI – Funding Information [grants as PI-principal investigators or I-investigator]<sup>5</sup>

Year	Title	Program	Role	Grant value
2017-2019	<b>FILIERASICURA</b>	Project lead by Sapienza CIS (Cyber Intelligence and Information Security Research Center)	Participant	---
2017-2019	<b>IT-SHIRT</b> - "IT empowering faSHlon design creators with a next-generation co-cReation ecosysTem"	Project funded by Sapienza Università di Roma	WP3 Leader	€ 37.000
2015-2018	<b>NEPTIS</b> – "Soluzioni ICT per la fruizione e l'esplorazione aumentata di Beni Culturali"	Programma Operativo Nazionale Ricerca e Competitività (PON R&C -PON03PE_00214_3)	OR-4 Leader	Financing to Sapienza: € 202.897
2016-2017	<b>DAKIP</b> – "Data-aware Adaptation of Knowledge-intensive Processes in Cyber-Physical Domains through Action-based Languages"	Project funded by Sapienza Università di Roma (Progetto di Avvio alla Ricerca)	Principal Investigator	€ 2.000
2014-2016	<b>ACI-I</b> – "Development of an ontology modeling for ACI and experimentation of the semantic technologies for accessing data"	Project funded by ACI (Automobile Club d'Italia) in collaboration with Sapienza Università di Roma	Participant	€ 120.000
2014-2015	<b>FIGO</b> – "Un Framework aperto ed Integrabile basato su modelli di nuova generazione per la Gestione ottimizzata e il cOnsolidamento di sistemi IT che prevedono l'erogazione di servizi B2B mediante l'utilizzo massivo di device mobile, anche attraverso il tracciamento ed il monitoraggio dei processi di business"	Project funded by Regione Lazio (POR FESR Lazio 2007/2013)	Unit Leader	€ 110.000

<sup>5</sup> See "Part XII - Further Information" for further details on the specific participation to the projects.

2014	<b>SUPER</b> – “ <i>SUPporting E-health knowledge-intensive pRocesses</i> ”	Project funded by Sapienza Università di Roma	Participant	€17.000
2013	<b>TESTMED</b> – “ <i>meTodi e tEcniche per la geSTione dei processi nella MEDicina D’urgenza</i> ”	Project funded by Sapienza Università di Roma	Participant	€24.000
2006–2009	<b>WORKPAD</b> – “ <i>An Adaptive Peer-to-Peer Software Infrastructure for Supporting Collaborative Work of Human Operators in Emergency/Disaster Scenarios</i> ”	Project funded by the European Union 6th Framework Programme (FP6)	Participant	Overall funding from EU: €1.850.000 Financing to Sapienza: €315.000
2005	<b>MAIS</b> - “ <i>Multichannel Adaptive Information Systems</i> ”	Project funded by Italian FIRB 2001	Participant	Financing to Sapienza: €1.200.000

## Part VII – Research Activities

Andrea Marrella is affiliated to **DASIlab** (Data and Service Integration) at DIAG. He is a member of the **Data and Service Management research group** and of the **Human-Computer Interaction research group**. His overall research activity has been carried out in Rome (Italy), Tartu (Estonia), and Toronto (Canada).

The **research activity** of Andrea Marrella concerns **theoretical, methodological, and practical aspects** in different areas of **Computer Science**, including Business Process Management, Modelling, Adaptation, Mining and Resilience, Cyber-Security and Human-Computer Interaction. Such topics are challenged in the application domains of smart manufacturing, healthcare, emergency management and cultural heritage.

Since 2007, Andrea Marrella regularly **publishes the results of his research** in top-level international journals and conferences. Notably, since 2013, he has increasingly established his **scientific independence** by authoring papers presented in collaboration with different authors than the supervisor. Overall, he has co-authored **56 peer-reviewed scientific papers** on the above research topics.

Since 2011, his research activity has been mainly devoted to investigate how to integrate the solid theoretical foundations provided by **action-based formalisms in Artificial Intelligence (AI)** with the practical needs required by **Business Process Management (BPM)** solutions. Thanks to the recognized results of his research, **he is actually considered as one of the pioneers of the concrete application of AI techniques to untangle complex challenges from the BPM domain**, such as the **automated synthesis of process models**, the **automated adaptation of running processes** and the **optimal alignment of execution traces against their underlying (procedural or declarative) process models**. For this reason, he was invited to give the **keynote talk** in the First Workshop on BP Innovation with Artificial Intelligence (BPAI’17) organized within the BPM 2017 conference (GI-GRIN Class A / CORE Class A), where he presented his research on “*What Automated Planning can do for BPM*” [W2]. He was also invited to publish (as a single author) an article at the Journal of Data Semantics (Springer) on this topic [U2].

From 2006 to 2010, the research of Andrea Marrella focused on realizing **advanced methodologies and tools** in the field of Human-Computer Interaction (HCI). Specifically, he designed and developed **innovative touch-based graphical user interfaces for pen-based mobile devices** (notice that touch-based interaction for mobile devices started to become popular since late 2008 with the mass production of iPhone 3G) and the realization of **advanced workflow engines and location-based services** for supporting collaborative work of human operators on-the-field in emergency/disaster scenarios.

His **current research** on HCI tackles a well-known (unsolved) challenge in this area, namely the **automated quantification of learnability of interactive systems**. In this direction, he is focusing on developing a

theoretical and practical framework that exploits Process Mining algorithms and technologies to automatically derive the learnability of a system during its daily use. The impact of this research, which requires a strong background and expertise in BPM and HCI, is potentially **ground-breaking** in the HCI field, as it aims at superseding the expensive and time-consuming learnability techniques for observing users in highly controlled environments over extended periods of time. The **long-term objective** is to realize **explainable and adaptive interactive systems**, which allow one to **automatically extract and understand the behaviours and the characteristics of users** that interact with such systems, thus enabling more precise **user profiling and modelling** that will be used as the basis for any **adaptive change to the system's behaviour** towards the user's specific needs.

In 2018, Andrea Marrella contributed to the writing of the second edition of the **white book on the future of cyber-security in Italy**. In this context, his **current research** on cyber-security is focused, on the one hand, on exploiting **Process Mining techniques** to the **detection of anomalous behaviours** and **prediction of security issues in information systems**. On the other hand, he is investigating user-centred solutions for tackling the **human factors in cyber-security**, in order to **increase cyber-awareness** and **reduce human errors**, which are often the cause of security breaches.

His main research accomplishments in all the areas of interest are summarized below.

#### Keywords

**Business Process Management**

*Application of AI techniques to tackle complex challenges in the BPM field*

*Data-aware and Knowledge-intensive Processes*

#### Brief Description

**Business Process Management (BPM)** is a research area based on the observation that each product/service that a company provides to the market is the outcome of a number of activities performed. **Business processes** are the key tools for organizing such activities and understanding their interrelationships.

In the context of the BPM field, **the research of Andrea Marrella** concentrates on *providing a formally well-founded view to BPM using formalisms developed for reasoning about actions in AI, such as situation Calculus, Indigolog and Automated Planning*. Specifically, in his **PhD Thesis [P1]**, Andrea Marrella has demonstrated that action-based languages provide a rich and natural framework for supporting the formal declarative specification and executable semantics of data-aware business processes and for automating a number of reasoning tasks that arise in this context, such as: the *automated generation of process models*, the *automated adaptation of business processes at run time* and the *optimal alignment of execution traces against their underlying (procedural or declarative) process models*. A description of the above topics is provided in the next boxes.

**Andrea Marrella is also involved** in investigating and designing solutions to the *management of Data-aware and Knowledge-intensive Processes (KiPs) [W7]*. In 2015, he wrote a complete state-of-the-art and an evaluation framework for KiPs, which is published in the Journal on Data Semantics (Springer) [J8] and is currently his most cited paper (113 citations according to Google Scholar). On this topic, he also organized two editions of the *Knowledge-intensive Business Processes (KIBP) Workshop*, which were co-located with KR 2012 and SOCA 2013, respectively.

In 2017, he wrote - together with Prof. Manfred Reichert of Ulm University (Germany) - a *systematic literature review on data-aware business processes*, which has been published in the Software and System Modeling journal (Springer) [J1]. Preliminary results of this research have been also published in national and international conferences [C15, N2].

All the above topics were also investigated within the DAKIP, WORKPAD, SUPER and FIGO projects.



<p><b>Process Modeling</b></p> <p><i>Automated generation of process models via planning techniques</i></p> <p><i>Automated synthesis of chemical process models through action-based formalisms in AI</i></p>	<p><b>Process Modeling</b> is the first step in the BPM lifecycle, which intends to provide a high-level specification of a business process that is independent from implementation and serves as a basis for process automation and verification.</p> <p>On this topic, <b>Andrea Marrella has co-authored</b> with Yves Lespérance (York University, Canada) some works describing <i>how AI planning can be employed to the automated generation of process models at design-time in case of incomplete knowledge</i> [J5, C21, W4]. These works are the result of a research started in 2012 during his appointment at York University of Toronto (Canada).</p> <p>In 2013, <b>Andrea Marrella has also investigated</b> the <i>formalization of an innovative approach based on action formalisms in Knowledge Representation and Reasoning for the automated synthesis of chemical process models in organic chemistry</i>. This effort produced two publications [W5, W6], which have been the result of a research started in 2013 (in collaboration with Prof. Mickhail Soutchanski) during his appointment at Ryerson University of Toronto (Canada).</p> <p>Since 2018, <b>Andrea Marrella is investigating</b> the realization of a novel visual language for modeling declarative business processes [C4].</p>
<p><b>Process Adaptation</b></p> <p><i>Automated process adaptation in cyber-physical domains through action-based formalisms in AI</i></p>	<p><b>Process Adaptation</b> is the ability of a business process to react to exceptional circumstances (that may be or may not be foreseen) and to adapt its structure accordingly. Since 2010, <b>Andrea Marrella has developed a research program</b> aimed at addressing the main issues of automated process adaptation in BPM.</p> <p>On this area, <b>his first publications</b> were targeted to <i>define a general technique to repair running processes in unpredictable environments</i> [C22, C24] and to <i>demonstrate that not only it is possible to employ AI planning techniques for the synthesis of recovery procedures, but also that such techniques can be successfully integrated with real BPM environments</i> [C25, C26].</p> <p><b>The main outcome</b> of this line of research has been the <i>development of a formal framework and a concrete implementation, called SmartPM, for solving the challenge of automated adaptation of data-aware business processes at run-time</i>. The theoretical approach underlying SmartPM has been presented at the prestigious KR'16 conference (GII-GRIN Class A+, CORE Class A*) [C20], where it has received 33 citations (to date), while its development as a fully-fledged PMS has been recently published in the top-ranked ACM Transactions on Intelligent Systems and Technologies [J7]. SmartPM is receiving considerable attention by the scientific community, to such an extent that Rick Hull (Senior Research Scientist at IBM T.J. Watson Research Center), in his keynote talk on "<i>Rethinking BPM in a Cognitive World: Transforming how we Learn and Perform Business Processes</i>" delivered at the BPM'16 conference, has described SmartPM as: "[...] <i>an excellent demonstration of how a smart integration of significant AI technologies can lead to the solution of complex practical problems in BPM</i>".</p> <p><b>The obtained research results</b> [J3, J6, C11, C16, C17, C19, C17, W3] have established <b>Andrea Marrella as one of the most influential researchers in the field of automated process adaptation</b>, and this is further testified by the fact that he was invited to write an overview chapter on "<i>Adaptive Process Management in Cyber-Physical Domains</i>", published in the Book: "<i>Advances in Intelligent Process-Aware Information Systems</i>" (Springer) [B2].</p> <p>Andrea Marrella has also investigated the above topic in the research project DAKIP, funded by Sapienza Università di Roma in 2016.</p>





<div> <div>Process Mining</div> <div>Trace alignment through planning techniques</div> <div>Benchmarks and frameworks for evaluating process discovery approaches</div> </div>	<p><b>Process Mining</b> is about extracting knowledge from event logs commonly available in today's information systems. These techniques provide new means to discover, monitor and improve processes in a variety of application domains. In the context of process mining, <i>trace alignment</i> consists of verifying whether the observed behavior of a process, stored in an event log, is compliant with its underlying model that encodes how it is allowed to be executed, and to repair it in order to ensure that norms and regulations are not violated.</p> <p>In 2016 and 2017, together with other international colleagues, <b>Andrea Marrella has developed three novel algorithms</b> to solve the trace alignment problem in process mining against procedural and declarative process models. <i>The developed algorithms, which leverage on AI planning techniques to the computation of optimal alignments, are able to outperform the existing approaches even of several orders of magnitude.</i> Andrea Marrella published these algorithms in the prestigious ICAPS'16 [C12] and ICAPS'18 [C2] (GII-GRIN Class A, CORE Class A*) and AAAI'17 [C10] (GII-GRIN Class A++, CORE A*) conferences and in the top-ranked Expert Systems with Applications journal (Elsevier) [J6]. Other works on this topic are: [C1,C7,N1]. Notice that part of the above research has been performed in collaboration with Prof. Marlon Dumas and Prof. Fabrizio Maria Maggi, during the appointment at University of Tartu (Estonia).</p> <p>Moreover, in 2017 <b>Andrea Marrella has published an article</b> (with renowned experts in the field of process mining) <i>developing a framework and a benchmark for classifying the automated discovery approaches available in the research literature</i>, which has been published at IEEE Transactions on Knowledge and Data Engineering (TKDE, IEEE) [J2].</p> <p>Thanks to his research on process mining, in 2017 <b>Andrea Marrella was invited to organize and give a full-day tutorial on Process Mining</b> at 18th International Conference on Product-Focused Software Process Improvement (PROFES 2017). The results of this tutorial has been published in [C6].</p>
<div> <div>Process Resilience</div> <div>Design-time approaches to improve resilience of data-aware processes</div> </div>	<p><b>Process Resilience</b> determines the long-term ability of a business process to successfully and robustly deal with adversities, so that the most frequent identified failures at run-time can be possibly incorporated in the process models. This will allow to make the future instantiations of a process model more robust against deviations and to mitigate the impact of exceptional situations.</p> <p>In the context of Process Resilience, the <b>research of Andrea Marrella</b> is focusing on <i>investigating design-time approaches to model processes in a way that they will result more resilient at run-time from a data-aware perspective.</i> On this topic, he published a paper [C9] at the prestigious CAiSE'17 conference (ranked as "class A", according to both GII-GRIN and CORE rankings), where he received the <b>Best Paper Award</b>. Furthermore, he was also invited to write a chapter for the book "Conceptual Modeling Perspectives" published by Springer [B1], and he wrote a journal article (that is currently under review) at the high-ranked Information Systems journal (Elsevier) [U1].</p>





<b>Human-Computer Interaction</b>	<p><b>Human-Computer Interaction (HCI)</b> is a research topic focusing on the interfaces between users and computers. In the context of HCI, the research of <b>Andrea Marrella</b> concentrates on:</p> <p>(i) <i>designing and realizing concrete process management systems for emergency operators that act in disaster situations by leveraging on user-centered design methodologies</i> [J10,J11,C28,C31,W8,W9];</p> <p>(ii) <i>designing multimodal user interfaces (UIs) for mobile devices in the healthcare and emergency management settings</i> [J9,C18,C23,C27,C29,C30];</p> <p>(iii) <i>investigating how to automatically derive learnability metrics associated to the usage of a system using Process Mining techniques</i> [C3,C14];</p> <p>(iv) <i>developing approaches based on gamification and crowd-sourcing techniques to improve the user experience of humans visiting a cultural site or a museum</i> [J4,C5,C8,C13,N3].</p> <p>The above research topics were also investigated within the MAIS, WORKPAD, TESTMED, SUPER, NEPTIS and IT-SHIRTS projects.</p>
<i>User-centered Design methodologies for effective design of Process Management Systems</i>	
<i>Multimodal User Interfaces (UIs)</i>	
<i>Learnability of Interactive Systems</i>	
<i>Gamification and crowd-sourcing techniques</i>	

<b>Cyber Security</b>	<p>The research field of <b>Cyber-Security</b> investigates solutions for protecting computers, networks, programs and data from unauthorized access or attacks that are aimed for exploitation. This field is of growing importance due to the increasing presence of connected artifacts (such as sensors and smartphones) producing huge amounts of data and events that may dramatically influence the reliability of modern information systems.</p> <p>In 2018, <b>Andrea Marrella</b> contributed to the writing of the second edition of the <b>white book on the future of cyber-security in Italy</b>. In this direction, In the context of Cyber-Security, the research of <b>Andrea Marrella</b> concentrates on:</p> <p>(i) <i>exploiting Process Mining techniques to the detection of anomalous behaviours and the prediction of security issues in information systems;</i></p> <p>(ii) <i>investigating user-centred solutions for tackling the human factors in cyber-security, in order to increase cyber-awareness and reduce human errors, which are often the cause of security breaches</i> [W1].</p> <p>The above research topics are also investigated within the FILIERASICURA project.</p>
<i>Detection of anomalous behaviours</i>	
<i>Prediction of security issues</i>	
<i>Human Factors in Cybersecurity</i>	

## Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Journal Papers [international]	11	Google Scholar	2008	2018
Book Chapters [scientific]	2	Google Scholar	2017	2017
Conference Papers [international]	31	Google Scholar	2007	2018
Conference Papers [national]	3	Google Scholar	2014	2017
International Workshops [scientific]	9	Google Scholar	2008	2018
Edited Works [scientific]	2	Google Scholar	2012	2015
Technical Reports [scientific]	4	Google Scholar	2011	2018
Theses [academic]	3	Sapienza	2005	2013
Papers under review	2	-----	---	---

Metrics	Google Scholar	Scopus
Number of Research Products*	56	48
Total Citations	684	380
Average Citations per Product°	12,21	7,9
Hirsch (H) index	16	12
i10-index	21	12
Normalized H index''	4 (2)	3 (1,5)

\*Edited works, technical reports and theses are not considered in the list of research products.

° The *average citations* are calculated on the basis of the peer-reviewed articles published (and already indexed in the respective databases) from 2007 to 2018.

'' *Normalized H index* is the H-index divided by the academic seniority. Notice that Dr. Andrea Marrella graduated in 2009, got his PhD in October 2013 and his first scientific publication relates to December 2007. For the computation of the metric, the academic seniority has been calculated in two different ways: (i) as the time span from the completion of the PhD, which can be estimated to be 4 years and 9 months (rounded down to 4 years); (ii) as the time span from the starting of the PhD, which can be estimated to be 8 years and 9 months (rounded down to 8 years); in the latter case, the value of the metric is in the round brackets.

International Journals<sup>7</sup>

- J1. S. Steinau, A. Marrella, K. Andrews, F. Leotta, M. Mecella, M. Reichert. *DALEC: A Framework for the Systematic Evaluation of Data-centric Approaches to Process Management Software*. In: International Journal on Software and Systems Modeling (ISSN: 1619-1374), Springer. In press.
- J2. [SELECTED PUBLICATION]  
A. Augusto, R. Conforti, M. Dumas, M. La Rosa, F. M. Maggi, A. Marrella, M. Mecella, A. Soo. *Automated Discovery of Process Models from Event Logs: Review and Benchmark*. In: IEEE Transactions on Knowledge and Data Engineering (ISSN 1041-4347), IEEE, July 2018 [JCR 3.438/3.899] [SJQR Q1] [GS 24] [SC 0]
- J3. [SELECTED PUBLICATION]  
A. Marrella, M. Mecella, S. Sardina. *Supporting Adaptiveness of Cyber-Physical Processes through Action-based Formalisms*. In: AI Communications (ISSN 0921-7126), Volume 31, Issue 1, pp. 47-74, IoS Press, February 2018 [JCR 0.654/0.871] [SJQR Q2/Q3] [GS 2] [SC 0]
- J4. F. Leotta, A. Marrella, M. Mecella, F. Palucci, C. Seri, T. Catarci. *Encouraging persons to visit cultural sites through mini-games*. In: EAI Endorsed Transactions on Serious Games (ISSN 2034-8800), Volume 18, Issue 14, EAI, January 2018
- J5. [SELECTED PUBLICATION]  
A. Marrella, Y. Lespérance. *A planning approach to the automated synthesis of template-based process models*. In: Service Oriented Computing and Applications (ISSN 1863-2386), Volume 11, Issue 4, pp. 367-392, Springer London, December 2017 [IF 1.691] [SJQR Q1/Q2] [GS 1] [SC 1]
- J6. [SELECTED PUBLICATION]  
M. de Leoni, A. Marrella. *Aligning Real Process Executions and Prescriptive Process Models through Automated Planning*. In: Expert Systems with Applications (ISSN 0957-4174), Volume 82, pp. 162-183, Elsevier, October 2017 [JCR 3.928/3.526] [SJQR Q1] [GS 13] [SC 7]
- J7. [SELECTED PUBLICATION]  
A. Marrella, M. Mecella, S. Sardina. *Intelligent Process Adaptation in the SmartPM System*. In: ACM Transactions on Intelligent Systems and Technology (ISSN: 2157-6904), Volume 8, Issue 2, ACM, January 2017 [JCR 3.196/10.473] [SJQR Q1] [GS 14] [SC 7]

<sup>6</sup> The 12 publications selected for the evaluation are explicitly tagged with the label [SELECTED PUBLICATION]. For such publications, the number of citations on Google Scholar is reported in the format [GS #], while the number of citations on Scopus is reported in the format [SC #]. The value N/A means that the specific contribution has not yet indexed on the respective database. Notice that the 12 selected publications are also included separately in the document: "Allegato D1 - Elenco\_12\_Pubblicazioni.pdf"

<sup>7</sup> The quality of a journal is assessed through the following metrics (all metrics are updated with 2016 annual values):

- Incites Journal Citation Reports (JCR) calculates the global/5-year Impact Factor of a journal.
- (In absence of JCR) Impact Factor (IF) extracted from the web page of the specific journal.
- SCImago Journal Rank (SJR) measures the scientific influence of a journal and ranges from Q1 (top) to Q4.



**J8. [SELECTED PUBLICATION]**

C. Di Ciccio, A. Marrella, A. Russo. *Knowledge-intensive Processes. Characteristics, Requirements and Analysis of Contemporary Approaches*. In: Journal on Data Semantics (ISSN 1861-2032), Volume 4, Issue 1, pp. 29-57, Springer Berlin Heidelberg, March 2015 [IF 1.501] [SJR Q1/Q2] [GS 113] [SC 70]

J9. T. Catarci, M. de Leoni, A. Marrella, M. Mecella, A. Russo, M. Bortenschlager, R. Steinmann. *WORKPAD: Process Management and Geo-Collaboration Help Disaster Response*. International Journal of Information Systems for Crisis Response and Management (ISSN 1937-9390), Volume 3, Issue 1, pp. 32-49, IGI Global, January-March 2011

J10. S. R. Humayoun, T. Catarci, M. de Leoni, A. Marrella, M. Mecella, M. Bortenschlager, R. Steinmann. *Designing Mobile Systems in Highly Dynamic Scenarios. The WORKPAD Methodology*. In: International Journal on Knowledge, Technology and Policy (ISSN 0897-1986), Volume 22, Issue 1, pp. 25-43, Springer Netherlands, March 2009

J11. T. Catarci, M. de Leoni, A. Marrella, M. Mecella, B. Salvatore, G. Vetere, S. Dustdar, L. Juszczak, A. Manzoor, Hong-Linh Truong. *Pervasive and Peer-to-Peer Software Environments for Supporting Disaster Responses*. In: IEEE Internet Computing Journal (ISSN 1089-7801), Volume 12, Issue 1, pp. 26-37, IEEE, January-February 2008

**Book Chapters**

B1. A. Marrella, M. Mecella, B. Pernici, G. Plebani. *Design-time Models for Resiliency*. In: Book on Conceptual Modeling Perspectives (ISBN 978-3-319-67270-0), pp. 105-120, Springer, October 2017

B2. A. Marrella, M. Mecella. *Adaptive Process Management in Cyber-Physical Domains*. In: Book on Advances in Intelligent Process-Aware Information Systems (ISBN 978-3-319-52179-4), Intelligent Systems Reference Library, Vol. 123, pp. 15-48, Springer International Publishing, May 2017

**International Conferences<sup>8</sup>**

C1. F. M. Maggi, A. Marrella, G. Capezzuto, Abel Armas Cervantes. *Explaining Non-Compliance of Business Process Models through Automated Planning*. In: 16th International Conf. on Service-Oriented Computing (ICSOC 2018), Springer, Hangzhou, Zhejiang, China, 12-15 November 2018 [GII-GRIN/CORE Class A], *in press*.

**C2. [SELECTED PUBLICATION]**

M. de Leoni, G. Lanciano, A. Marrella. *Aligning Partially-Ordered Process-Execution Traces and Models Using Automated Planning*. In: Proceedings of the 28th International Conference on Automated Planning and Scheduling (ICAPS 2018), pp. 321-329, AAAI Press, Delft, the Netherlands, 24-29 June, 2018 [CORE A\*] [GII-GRIN A] [GS 0] [SC N/A]

<sup>8</sup> The quality of a conference is assessed according to the well-known GII-GRIN (A++, A+: excellent, top notch conferences, A: very good events) and CORE (A\*: top 4%, A: top 14%) rankings.



### C3. [SELECTED PUBLICATION]

- A. Marrella, T. Catarci. *Measuring the Learnability of Interactive Systems using a Petri Net Based Approach*. In: Proceedings of 2018 Conference on Designing Interactive Systems (DIS 2018), pp. 1309-1319, ACM, Hong Kong, 9-13 June, 2018 [GII-GRIN Class A-] [GS 0] [SC N/A]
- C4. L. Ferro, A. Marrella. *VERTO - A Visual Notation for Declarative Process Models*. In: Proceedings of 2018 International Conference on Advanced Visual Interfaces (AVI '18), ACM, Castiglione della Pescaia, Italy, 29 May - 1 June, 2018
- C5. F. Sapiro, A. Marrella, T. Catarci. *Integrating Body Scanning Solutions into Virtual Dressing Rooms*. In: Proceedings of 2018 International Conference on Advanced Visual Interfaces (AVI '18), ACM, Castiglione della Pescaia, Italy, 29 May - 1 June, 2018
- C6. A. Janes, F. M. Maggi, A. Marrella, M. Montali. *From Zero to Hero: A Process Mining Tutorial*. In: Proceedings of the 18th International Conference on Product-Focused Software Process Improvement (PROFES 2017), pp. 625-629, Springer, Innsbruck, Austria, 29 November – 1 December 2017
- C7. M. de Leoni, G. Lanciano, A. Marrella. *A Tool for Aligning Event Logs and Prescriptive Process Models through Automated Planning*. In: Proceedings of the 15th International Conference on Business Process Management (BPM 2017), Demonstration Track, CEUR Workshop Proceedings (Vol. 1920), Barcelona, Spain, 10-15 September 2017 [GII-GRIN/CORE Class A]
- C8. T. Collerton, A. Marrella, M. Mecella, and T. Catarci. *Route Recommendations to Business Travelers Exploiting Crowd-Sourced Data*. In: Proceedings of the 14th International Conference on Mobile Web and Intelligent Information Systems (MobiWIS 2017), pp. 3-17, Springer International Publishing, Prague, Czech Republic, 21-23 August 2017
- C9. [SELECTED PUBLICATION]  
G. Plebani, A. Marrella, M. Mecella, M. Mizmizi, B. Pernici. *Multi-party Business Process Resilience by Design: A Data-centric Perspective. Best Paper Award*. In: Proceedings of the 29th International Conference on Advanced Information Systems Engineering (CAISE 2017), pp. 110-124, Springer International Publishing, Essen (Germany), 12-16 June 2017 [CORE A] [GII-GRIN A] [GS 2] [SC 1]
- C10. [SELECTED PUBLICATION]  
G. De Giacomo, F. M. Maggi, A. Marrella, F. Patrizi. *On the Disruptive Effectiveness of Automated Planning for LTLf-based Trace Alignment*. In: Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence (AAAI-17), pp. 3555-3561, AAAI Press, San Francisco, USA, 4-9 February 2017 [CORE A\*] [GII-GRIN A++][GS 10] [SC 6]
- C11. A. Marrella, M. Mecella, S. Sardina. *An Adaptive Process Management System Implementation based on Situation Calculus, Indigolog and Classical Planning*. In: Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI 2016), Demonstration Track, pp. 4258-4259, AAAI Press, New York, USA, 9-15 July 2016 [GII-GRIN/CORE Class A\*/A++]
- C12. [SELECTED PUBLICATION]  
G. De Giacomo, F. M. Maggi, A. Marrella, S. Sardina. *Computing Trace Alignment against Declarative Process Models through Planning*. In: Proceedings of the 26th International





- C13. T. Catarci, F. Leotta, **A. Marrella**, M. Mecella, D. Sora, P. Cottone, G. Lo Re, M. Morana, M. Ortolani, V. Agate, G. Renato, G. Meschino, G. Pecoraro. *Your Friends Mention It. What About Visiting It? A Mobile Social-Based Sightseeing Application*. In: Proceedings of the 13th International Conference on Advanced Visual Interfaces (AVI 2016), pp. 300-301, ACM, Bari, Italy, 7-10 June 2016
- C14. O. Hanteer, **A. Marrella**, M. Mecella, T. Catarci. *A Petri-Net Based Approach to Measure the Learnability of Interactive Systems*. In: Proceedings of the 13th International Conference on Advanced Visual Interfaces (AVI 2016), pp. 312-313, ACM, Bari, Italy, 7-10 June 2016
- C15. **A. Marrella**, M. Mecella, A. Russo, S. Steinau, K. Andrews, M. Reichert. *Data in Business Process Models. A Preliminary Empirical Study*. In: Proceedings of the 8th IEEE International Conference on Service Oriented Computing & Applications (SOCA 2015), pp. 116-122, IEEE, Rome, Italy, 19-21 October 2015
- C16. **A. Marrella**, M. Mecella, P. Halapuu, S. Sardina. *Automated Process Adaptation in Cyber-Physical Domains with the SmartPM System*. In: Proceedings of the 8th IEEE International Conference on Service Oriented Computing & Applications (SOCA 2015), pp. 59-64, IEEE, Rome, Italy, 19-21 October 2015
- C17. **A. Marrella**, M. Mecella, P. Halapuu, S. Sardina. *SmartPM: An Adaptive Process Management System for Executing Processes in Cyber-Physical Domains*. In: Proceedings of the 13th International Conference on Business Process Management (BPM 2015), Demonstration Track, CEUR Workshop Proceedings (Vol. 1418), pp. 115-119, Innsbruck, Austria, 31 August - 3 September 2015 [GII-GRIN/CORE Class A]
- C18. F. Cossu, **A. Marrella**, M. Mecella, A. Russo, S. Kimani et al. *Supporting Doctors through Mobile Multimodal Interaction and Process-aware Execution of Clinical Guidelines*. In: Proceedings of the 7th IEEE International Conference on Service Oriented Computing & Applications (SOCA 2014), pp. 183-190, IEEE, Matsue, Japan, 17-19 November 2014
- C19. **A. Marrella**, M. Mecella, S. Sardina, P. Tucceri. *SmartPM: Automated Adaptation of Dynamic Processes*. In: Proceedings of the 12th International Conference on Service-Oriented Computing (ICSOC 2014), Demonstration Track, pp. 423-427, Springer International Publishing, Paris, France, 3-6 November 2014 [GII-GRIN/CORE Class A]
- C20. [SELECTED PUBLICATION]  
**A. Marrella**, M. Mecella, S. Sardina. *SmartPM: An Adaptive Process Management System through Situation Calculus, IndiGolog, and Classical Planning*. In: Proceedings of the 14th International Conference on Principles of Knowledge Representation and Reasoning (KR 2014), AAAI Press, Vienna, Austria, 20-24 July 2014 [CORE A\*] [GII-GRIN A+] [GS 33] [SC 23]
- C21. **A. Marrella**, Y. Lespérance. *Synthesizing a Library of Process Templates through Partial-Order Planning Algorithms*. In: Proceedings of the 14th International Conference on Business Process Modeling, Development and Support (BPMDS 2013), in conjunction with CAiSE 2013, pp. 277-291, Springer Berlin Heidelberg, Valencia, Spain, 17-18 June 2013



- C22. **A. Marrella**, A. Russo, M. Mecella. *Planlets: Automatically Recovering Dynamic Processes in YAWL*. In: Proceedings of the 20th International Conference on Cooperative Information Systems (CoopIS 2012), pp. 268-286, Springer Berlin Heidelberg, Rome, Italy, 10-14 September 2012 [GII-GRIN/CORE Class A]
- C23. F. Cossu, **A. Marrella**, M. Mecella, A. Russo, G. Bertazzoni, M. Suppa, F. Grasso. *Improving Operational Support in Hospital Wards through Vocal Interfaces and Process-Awareness*. In Proceedings of the 25th IEEE International Symposium on Computer-Based Medical Systems (CBMS 2012), pp. 1-6, IEEE, Rome, Italy, 20-22 June 2012
- C24. **A. Marrella**, M. Mecella, A. Russo. *Featuring Automatic Adaptivity through Workflow Enactment and Planning*. In: Proceedings of the 7th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom 2011), pp. 372-381, IEEE, Orlando, Florida, USA, 15-18 October 2011
- C25. **A. Marrella**, M. Mecella, A. Russo, A.H.M. ter Hofstede, S. Sardina. *Making YAWL and SmartPM Interoperate: Managing Highly Dynamic Processes by Exploiting Automatic Adaptation Features*. In: Proceedings of the 9th International Conference on Business Process Management (BPM 2011), Demonstration Track, CEUR Workshop Proceedings (vol. 820), Clermont-Ferrand, France, 28 August - 2 September 2011
- C26. **A. Marrella**, M. Mecella. *Continuous Planning for solving Business Process Adaptivity*. In: Proceedings of the 12th International Conference on Business Process Modeling, Development and Support (BPMDS 2011), Springer Berlin Heidelberg, pp. 118-132, London, UK, 20-21 June 2011
- C27. **A. Marrella**, M. Mecella, A. Russo. *Collaboration On-the-field: Suggestions and Beyond*. In: Proceedings of the 8th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2011), Lisbon, Portugal, 8-11 May 2011
- C28. T. Catarci, M. de Leoni, **A. Marrella**, M. Mecella, M. Bortenschlager, R. Steinmann. *The WORKPAD Project Experience: Improving the Disaster Response through Process Management and Geo Collaboration*. In: Proceedings of the 7th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2010), Seattle, USA, 2-5 May 2010
- C29. S. R. Humayoun, T. Catarci, M. de Leoni, **A. Marrella**, M. Mecella, M. Bortenschlager, R. Steinmann. *The WORKPAD User Interface and Methodology: Developing Smart and Effective Mobile Applications for Emergency Operators*. In: Proceedings of the 5th International Conference on Universal Access in Human-Computer Interaction (UAHCI 2009), pp. 343-352, Springer Berlin Heidelberg, San Diego, USA, 19-24 July 2009
- C30. A. Capata, **A. Marrella**, R. Russo, M. Bortenschlager, H. Rieser. *A Geo-based Application for the Management of Mobile Actors during Crisis Situations*. In: Proceedings of the 5th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2008), pp. 219-229, Washington DC, USA, 4-7 May 2008
- C31. M. de Leoni, **A. Marrella**, M. Mecella, F. De Rosa, A. Poggi, A. Krek, F. Manti. *Emergency Management: from User Requirements to a Flexible P2P Architecture*. In: Proceedings of the 4th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2007), pp. 271-279, Delft, the Netherlands, 13-16 May 2007



## National Conferences

- N1. M. de Leoni, **A. Marrella**. *How Planning Techniques Can Help Process Mining: The Conformance-Checking Case*. In: Proceedings of the 25th Italian Symposium on Advanced Database Systems (SEBD 2017), CEUR Workshop Proceedings (Vol. 2037), Squillace Lido, Catanzaro, Italy, 25-29 June 2017
- N2. **A. Marrella**, M. Mecella, A. Russo, S. Steinau, K. Andrews, M. Reichert. *A Survey on Handling Data in Business Process Models (Discussion Paper)*. In: Proceedings of the 23th Italian Symposium on Advanced Database Systems (SEBD 2015), Curran Associates, pp. 304-311, Gaeta, Italy, June 14-17 2015
- N3. **A. Marrella**, S. Vassos. *Story Generation in PDDL using Character Moods: A Case Study on Iliad's First Book*. In: 8th Hellenic Conference on Artificial Intelligence (SETN 2014), pp. 583-588, Springer International Publishing, Ioannina, Greece, 15-17 May 2014

## International Workshops

- W1. T. Catarci, M. Amendola, F. Bertacchini, E. Bilotta, M. Bracalenti, P. Buono, A. Cocco, M. F. Costabile, G. Desolda, F. Di Nocera, S. Federici, G. Gaudino, R. Lanzilotti, **A. Marrella**, M. L. Mele, P. S. Pantano, I. Poggi, L. Tarantino. *Digital Interaction: Where are we going?* In: ECONA Workshop, Proceedings of the 2018 International Conference on Advanced Visual Interfaces (AVI 2018), ACM, Castiglione della Pescaia, Italy, 29 May - 1 June 2018
- W2. **A. Marrella**. *What Automated Planning can do for Business Process Management*. In: Proceedings of the 1st International Workshop on BP Innovation with AI (BPAI 2017), pp. 7-19, Springer International Publishing, Barcelona, Spain, 11 September 2017
- W3. **A. Marrella**, M. Mecella. *Cognitive Business Process Management for Adaptive Cyber-Physical Processes* In: Proceedings of the 1st International Workshop on Cognitive Business Process Management (CBPM 2017), pp. 429-439, Springer International Publishing, Barcelona, Spain, 11 September 2017
- W4. **A. Marrella**, Y. Lesperance. *Towards a Goal-Oriented Framework for the Automatic Synthesis of Underspecified Activities in Dynamic Processes*. In: Proceedings of the 2nd International Workshop on Knowledge-intensive Business Processes (KIBP 2013), pp. 361-365, IEEE, Kauai, USA, 16 December 2013
- W5. A. Masoumi, M. Soutchanski, **A. Marrella**. *Organic Synthesis as Artificial Intelligence Planning*. In: Proceedings of the 6th International Workshop on Semantic Web Applications and Tools for Life Sciences (SWAT4LS 2013), CEUR Workshop Proceedings (Vol. 1114), Edinburgh, UK, 10 December 2013
- W6. A. Masoumi, **A. Marrella**, M. Soutchanski. *Towards a Planning-based Approach to the Automated Design of Chemical Processes*. In: Proceedings of the Workshop on AI meets Business Processes (AIBP 2013), pp. 61-70, CEUR Workshop Proceedings (Vol. 1101), Turin, Italy, 6 December 2013



- W7. C. Di Ciccio, **A. Marrella**, A. Russo. *Knowledge-intensive Processes: An Overview of Contemporary Approaches*. In: Proceedings of the 1st International Workshop on Knowledge-intensive Business Processes (KIBP 2012), pp. 33-47, CEUR Workshop Proceedings (Vol. 861), Rome, Italy, 15 June 2012
- W8. M. de Leoni, **A. Marrella**, A. Russo. *Process-aware Information Systems for Emergency Management*. In: Proceedings of the International Workshop on Emergency Management through Service Oriented Architectures (EMSOA) co-located with the ServiceWave 2010 Conference, pp. 50-58, Springer Berlin Heidelberg, Ghent, Belgium, 13 December 2010
- W9. M. de Leoni, **A. Marrella**, M. Mecella, S. Valentini, S. Sardina. *Coordinating Mobile Actors in Pervasive and Mobile Scenarios: An AI-based Approach*. In: Proceedings of the 17th International Workshops on Enabling Technologies: Infrastructures for Collaborative Enterprises (WETICE 2008), pp. 82-87, IEEE, Rome, Italy, 23-25 June 2008

#### Edited Works

- E1. D. Lembo, R. Torlone, **A. Marrella**. *Proceedings of the 23rd Italian Symposium on Advanced Database Systems*, SEBD 2015, Gaeta, Italy, June 14-17, 2015. Curran Associates, Inc. 2015, ISBN 978-1-5108-1087-7
- E2. A. H. M. ter Hofstede, M. Mecella, S. Sardina, **A. Marrella**. *Proceedings of the 1st International Workshop on Knowledge-intensive Business Processes*, KIBP 2012, Rome, Italy, June 15, 2012. CEUR Workshop Proceedings, vol. 861, ISSN 1613-0073

#### Technical Reports

- T1. **A. Marrella**, M. Mecella, M. Sharf, T. Catarci. The TESTMED Project Experience. Process-aware Enactment of Clinical Guidelines through Multimodal Interfaces. In: arXiv preprint arXiv:1807.02022
- T2. F. M. Maggi, **A. Marrella**, F. Milani, A. Soo, S. Kasela. A User Evaluation of Automated Process Discovery Algorithms. In: arXiv preprint arXiv:1806.03150
- T3. T. Catarci, S.R. Humayoun, F. Leotta, **A. Marrella**, M. Mecella, A. Poggi. *HORIZON: A Development Methodology for Collaborative Projects*. In: DIAG Technical Reports. 2015
- T4. M. de Leoni, **A. Marrella**, M. Mecella, S. Sardina. *SmartPM - Featuring Automatic Adaptation to Unplanned Exceptions*. Technical Report of Dipartimento di Informatica e Sistemistica Antonio Ruberti, Sapienza Università di Roma. June 2011

#### Papers under Review

- U1. P. Plebani, **A. Marrella**, M. Mecella, B. Pernici. *A Design-time Data-centric Maturity Model for Assessing Resilience in Multi-Party Business Processes*. Under Review at: Information Systems (Elsevier, ISSN: 0306-4379)
- U2. **A. Marrella**. *Automated Planning for Business Process Management*. Under Review at: Journal on Data Semantics (Springer, ISSN 1861-2032)



## Theses

- P1. **A. Marrella.** *SmartPM: Automatic Adaptation of Dynamic Processes at Run-Time*. PhD Thesis in Engineering in Computer Science (Cycle XXV), Sapienza Università di Roma, Italy. October 2013
- M1.A. **Marrella.** *User-Centered Design Methodologies. The Approach and the Case of the WORKPAD project*. M.Sc. Thesis in Engineering in Computer Science, Sapienza Università di Roma, Italy. October 2009
- B1. **A. Marrella.** *An Environment for the Automatic Generation of User Interfaces*. B.Sc. Thesis in Engineering in Computer Science, Sapienza Università di Roma, Italy. May 2005

## Part X – Keynotes, Invited talks, Tutorials and Papers presentation

### (X A) – Keynote Talks

- “*What Automated Planning can do for Business Process Management*”. Keynote talk held at the 1st International Workshop on BP Innovation with AI (BPAI 17), organized within the 15th International Conference on Business Process Management (BPM 2017), Barcelona, Spain, 11 September 2017

### (X B) – Invited Talks

Andrea Marrella was invited by colleagues of international universities to present the results of his research at various institutions worldwide:

- “*The use of AI Planning for BPM*”. Seminar held at University of Tartu (Estonia), November 2, 2016. Invited by Prof. Marlon Dumas.
- “*Applying Process Management Methods and Techniques to Pervasive and Smart Environments*” at Vienna University of Economics and Business (Vienna, Austria), July 21, 2014. Invited by Prof. Jan Mendling.
- “*Challenges in Dynamic Processes: Mining for Semi-structured Information, Providing Run-time Automated Adaptation, Representing and Enacting Data-centric Processes*”. Seminar held at Ulm University (Ulm, Germany) together with Prof. Massimo Mecella, January 16, 2014. Invited by Prof. Manfred Reichert.
- “*Synthesizing a Library of Process Templates through Partial-Order Planning Algorithms*”. Seminar held at Ryerson University (Toronto, Canada), July 3, 2013. Invited by Prof. Mikhail Soutchanski.
- “*Run-time Adaptation of Knowledge-intensive Processes through AI Techniques: Research Challenges and Some Solutions*”. Seminar held at York University (Toronto, Canada), February 14, 2012. Invited by Prof. Yves Lespérance.
- “*Run-time Adaptation of Knowledge-intensive Processes through AI Techniques: Research Challenges and Some Solutions*”. Seminar held at the University of Toronto (UoT, Toronto, Canada), February 8, 2012. Invited by Prof. Sheila McIlraith.





## (X C) – Tutorials

- “From Zero to Hero”. Tutorial to be held at 18th International Conference on Product-Focused Software Process Improvement (PROFES 2017), Innsbruck, Austria, 29 November 2017.

## (X D) – Papers Presentation

Andrea Marrella has presented the results of his research in the following events:

Year	Event	Paper
2018	2018 Int. Conference on Designing Interactive Systems (DIS '18)	Measuring the Learnability of Interactive Systems Using a Petri Net Based Approach
2017	2017 HFES Europe Chapter - Human Factors & Ergonomics Society	An Approach to Objectively Measure the Learnability of Interactive Systems
2017	15th Int. Conference on Business Process Management (BPM 2017)	A Tool for Aligning Event Logs and Prescriptive Process Models through Automated Planning
2016	25th Int. Joint Conference on Artificial Intelligence (IJCAI-16)	An Adaptive Process Management System Implementation based on Situation Calculus, Indigolog and Classical Planning
2016	26th Int. Conference on Automated Planning and Scheduling (ICAPS 2016)	Computing Trace Alignment against Declarative Process Models through Planning
2015	13th Int. Conference on Business Process Management (BPM 2015)	SmartPM: An Adaptive Process Management System for Executing Processes in Cyber-Physical Domains
2015	23rd Italian Symposium on Advanced Database Systems (SEBD 2015)	A Survey on Handling Data in Business Process Models (Discussion Paper)
2015	8th IEEE International Conference on Service-Oriented Computing and Applications, (SOCA 2015)	Automated Process Adaptation in Cyber-Physical Domains with the SmartPM System
2014	2th Int. Conference on Service Oriented Computing (ICSOC 2014)	SmartPM: Automated Adaptation of Dynamic Processes
2014	14th Int. Conference on Principles of Knowledge Representation and Reasoning (KR 2014)	SmartPM: An Adaptive Process Management System through Situation Calculus, IndiGolog, and Classical Planning
2013	14th Int. Conference on Business Process Modeling, Development and Support (BPMDS 2013)	Synthesizing a Library of Process Templates through Partial-Order Planning Algorithms
2013	Workshop on "AI meets Business Processes", 13th Conference of the Italian Association for Artificial Intelligence (AixIA 2013)	Towards a Planning-Based Approach to the Automated Design of Chemical Processes



2013	2nd International Workshop on Knowledge-intensive Business Processes (KiBP 2013)	Towards a Goal-oriented Framework for the Automatic Synthesis of Underspecified Activities in Dynamic Processes
2012	20th Int. Conference on Cooperative Information Systems (CoopIS 2012)	Planlets: Automatically Recovering Dynamic Processes in YAWL
2011	7th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom 2011)	Featuring Automatic Adaptivity through Workflow Enactment and Planning
2011	9th Int. Conference on Business Process Management (BPM 2011)	Making YAWL and SmartPM Interoperate: Managing Highly Dynamic Processes by Exploiting Automatic Adaptation Features
2011	12th Int. Conference on Business Process Modeling, Development and Support (BPMDS 2011)	Continuous Planning for Solving Business Process Adaptivity
2011	8th Int. Conference on Information Systems for Crisis Response and Management (ISCRAM 2011)	Collaboration On-the-field: Suggestions and Beyond

## Part XI – Professional Service

Andrea Marrella is regularly involved in the main events and activities organized by the scientific community, related to his research areas. Notably, since 2017, he acts as:

- **Information Director** of the ACM Journal on Data Quality (ISSN 1936-1955).
- **Expert reviewer** for the **Discovery Grant Program** financed by **Natural Sciences and Engineering Research Council of Canada**.

### (XI A) – Editorial Board Membership of International Journals

Since 2017, Andrea Marrella is member of the Editorial Board of the International Journal of Information Systems for Crisis Response and Management (ISSN 1937-9390).

### (XI B) – Conferences and Workshops Organization and Chairship

As far as organization and chairship of conferences and workshops, Andrea Marrella has acted/is acting as:

- Organization Chair of the 31st Int. Conf. on Advanced Information Systems Engineering (CAISE 2019)
- Demo & Poster Chair of the 36th ACM Int. Conf. on Advanced Visual Interfaces (AVI 2018)
- Local Chair of the 8th IEEE Int. Conf. on Service Oriented Computing & Applications (SOCA 2015)
- Proceedings Chair of the 23rd Italian Symposium on Advanced Database Systems (SEBD 2015)
- Publicity Chair of the 12th Int. Conf. on Mobile Web and Intelligent Inf. Syst. (MobiWis 2015)
- PC Chair of the 2nd Int. Workshop on Knowledge-intensive Business Processes (KiBP 2013)
- Proceedings Chair of the 1st Int. Workshop on Knowledge-intensive Business Processes (KiBP 2012)



#### **(XI C) – Program Committee Membership**

Andrea Marrella serves/has served in the Program Committee of:

- 34th ACM/SIGAPP Symposium On Applied Computing (SAC 2019)
- 16th International Conference on Business Process Management (BPM 2018)
- 14th International Conference on Advanced Visual Interfaces (AVI 2018)
- 2018 International Conference on Software and System Processes (ICSSP 2018)
- 17th Int. Conference of the Italian Association for Artificial Intelligence (AI\*IA 2018)
- 14th International Conference on Web Information Systems and Technologies (WEBIST 2018)
- 14th International Conference on Intelligent Environments - Video & Demo track (IE 2018)
- 1st International Workshop on Artificial Intelligence for BPM (AI4BPM 2018)
- 2nd International Workshop on BP-Meet-IoT (BP-Meet-IoT 2018)
- 6th International Workshop on Declarative/Decision/Hybrid Mining and Modelling for Business Processes (DeHMiMoP'18)
- 2017 International Conference on Software and System Processes (ICSSP 2017)
- 13th International Conference on Web Information Systems and Technologies (WEBIST 2017)
- 1st International Workshop on BP Innovations with Artificial Intelligence (BPAI 2017)
- 5th International Workshop on Declarative/Decision/Hybrid Mining and Modelling for Business Processes (DeHMiMoP'17)
- 1st International Workshop on BP-Meet-IoT (BP-Meet-IoT 2017)
- 3rd International Workshop on the Role of Real-world objects in BPM Systems (RW-BPMS 2017)
- 12th International Conference on Web Information Systems and Technologies (WEBIST 2016)
- 9th International Workshop on Evolutionary Business Processes (EVL-BP 2016)
- 2nd International Workshop on the Role of Real-world objects in Business Process Management Systems (RW-BPMS 2016)
- 1st International Workshop on Decision and Rule Mining (DRUM 2015)
- 1st International Workshop on the Role of Real-world objects in Business Process Management Systems (RW-BPMS 2015)
- 2014 Symposium on Computational Intelligence and Data Mining - Special Session on Business Process Analytics, Process Mining and Process Big Data (CIDM 2014)

#### **(XI D) – Reviewer for International Journals, Conferences and Workshops**

Andrea Marrella serves/has served regularly as a reviewer for:

- **International Journals:**
  - IEEE TKDE - Transactions on Knowledge and Data Engineering (IEEE)
  - IEEE TSC - Transactions on Services Computing (IEEE)
  - IEEE SMC - Transactions on Human-Machine Systems (IEEE)
  - ACM TOCHI - Transactions on Computer-Human Interaction (ACM)
  - JAIR - Journal of Artificial Intelligence Research (AAAI Press)
  - Data & Knowledge Engineering (Elsevier)
  - Information Systems (Elsevier)
  - Journal on Data Semantics (Springer)



- Business & Information Systems Engineering (Springer)
  - Frontiers of Computer Science (Springer)
  - MTAP - Multimedia tools and Applications (Springer)
  - Journal of Software: Evolution and Process (Wiley)
  - International Journal of Cooperative Information Systems (World Scientific)
  - Machines (MDPI)
  - Applied Sciences (MDPI)
  - Methods of Information in Medicine (Schattauer)
  - AI Communications (IoS Press)
- **International Conferences:**
    - Information and Knowledge Management (CIKM)
    - Data Engineering (ICDE)
    - Business Process Management (BPM)
    - Business Information Systems (BIS)
    - Service Oriented Computing (ICSOC)
    - Services Computing (SCC)
    - Service Oriented Computing & Applications (SOCA)
    - Cooperative Information Systems (COOPIS)
    - Mobile Software Eng. and Systems (MOBILESoft)
    - Advanced Visual Interfaces (AVI)
    - Web Information System Engineering (WISE)
    - Information Systems for Crisis Response and Management (ISCRAM)
    - ACM Multimedia (ACMMM)
- **International Workshops:**
    - Knowledge-intensive Business Processes (KiBP)
- **National Conferences:**
    - Italian Symposium on Advanced Database Systems (SEBD)
    - Conference of the Italian SIGCHI Chapter (CHIItaly)

## Part XII – Further Information

### (XII A) – Participation to Research Projects

Andrea Marrella is/has been involved in the following research projects:

1. (December 2017 – present) **IT-SHIRT -- IT-empowering faSHion design creators with a next-generation co-cReation ecosysTem** – The IT-SHIRT project aims at investigating (i) CAD tools for real-time collaboration of designers over virtual 3D models of fashion garments, (ii) software engines on top of CAD tools to provide designers with smart recommendations and creative support, (iii) online and offline digital showroom platforms, and (iv) social marketing engines for capturing consumer feedback and providing targeted marketing recommendations. **Andrea Marrella is the scientific coordinator of WP3**, entitled: “Techniques and Methods for the IT-SHIRT fashion-CAD (F-CAD)”, which is in charge of the definition of innovative basic techniques and methods for 3D collaborative



modelling, interactive animation of virtual garment, real-time rendering of cloth materials, mixed-initiative design via computational creators, etc., and their possible prototype realization.

2. (January 2017 - present) **FILIERASICURA** – The FilieraSicura project aims at investigating how to make more trusted and secure the supply chain (SC) of a domestic critical infrastructure. It will tackle the problem of securing the SC by developing a novel, dedicated methodology. This result will be achieved by targeting the core aspects of the SC in depth. In the range of the project, **Andrea Marrella is investigating how the application of Process Mining techniques can be leveraged to the detection of anomalous behaviors and the prediction of security issues** by analyzing the execution logs recorded by information systems.
3. (September 2016 – September 2017) **Data-aware Adaptation of Knowledge-intensive Processes in Cyber-Physical Domains through Action-based Languages** – The increasing application of process-oriented approaches in new challenging cyber-physical domains beyond business computing (e.g., healthcare, emergency management, etc.) has led to reconsider the level of flexibility and support required to manage knowledge-intensive processes (KIPs) in such domains. A KIP is influenced by user decision making and coupled with contextual data and knowledge production acquired/produced by sensors/actuators disseminated in the environment, and must be robust to unexpected conditions and adaptable to unanticipated exceptions. To tackle this issue, this research project focuses on providing a formally well-founded view to KIPs through the use of action-based languages developed for reasoning about actions in Artificial Intelligence, which provide a natural framework for the formal specification of mechanisms to model world changes and responding to anomalous situations in an automated way during KIP execution. **Andrea Marrella is the principal investigator of this research project**, which is funded by Sapienza Università di Roma.
4. (January 2015 – March 2018) **NEPTIS** – “Soluzioni ICT per la fruizione e l’esplorazione aumentata di Beni Culturali”. The NEPTIS Project focuses on developing ICT-based solutions for augmented fruition and exploration of cultural heritage. Concretely, it aims at implementing an integrated system to create services and applications supporting smart itineraries, which will offer to citizens, tourists and visitors an assisted access and a personalized experience before, during and after their visits to physical cultural assets. In this project, **Andrea Marrella is acting as Scientific Leader of OR4** (ORs correspond to Work Packages of the project), entitled: “Sistema per la definizione e creazione di servizi a supporto dell’esperienza culturale”. Among the others, one of the main tasks of Andrea Marrella was to develop the planning-based reasoning engine for the generation “on-the-fly” of personalized paths to visit a cultural area based on users’ preferences.
5. (July 2014 – July 2016) **ACI-I** – Development of an ontology modeling for ACI (Automobile Club d’Italia) and experimentation of semantic technologies for accessing data. In this project, **Andrea Marrella participated to the following activities:**
  - Knowledge gathering over the domain of interest
  - Ontology development
  - Data source analysis
6. (September 2014 – September 2015) **FIGO** – “Un Framework aperto ed Integrabile basato su modelli di nuova generazione per la Gestione ottimizzata e il cOnsolidamento di sistemi IT che prevedono l’erogazione di servizi B2B mediante l’utilizzo massivo di device mobile, anche attraverso il tracciamento ed il monitoraggio dei processi di business”. The FIGO project developed an open framework that allows performing process mining and data mining techniques on processes and data



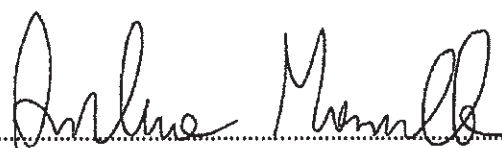


coming from Telecommunication companies. **Andrea Marrella has covered the role of unit leader of the Process Mining component.**

7. (January 2013 – December 2013) **SUPER** – “SUPporting E-health knowledge-intensive pROcesses”. In the range of SUPER, **Andrea Marrella led the realization of a Process Management System for the management of health care activities.**
8. (January 2013 – December 2013) **TESTMED** – “*meTodi e tEcniche per la geSTione dei processi nella MEdicina D’urgenza*”. In the range of TESTMED, **the activity of Andrea Marrella was targeted to the development of multimodal interfaces for mobile systems** to be used by doctors and nurses in hospital wards.
9. (November 2006 - September 2009) **WORKPAD** – *An Adaptive Peer-to-Peer Software Infrastructure for Supporting Collaborative Work of Human Operators in Emergency/Disaster Scenarios*. The European project WORKPAD (financed by the Sixth Framework Program FP6) has developed an innovative software infrastructure (software, models, services) and communication technologies for supporting collaborative work of human operators in emergency/disaster scenarios. **The main activities held by Andrea Marrella in the range of the project were:**
  - Requirements elicitation and analysis
  - Study of User-Centered methodologies and approaches
  - Realization and design of user interfaces
  - Drafting of several project deliverables
  - Active participation to project meetings
  - Design and analysis of usability tests
  - Implementation of the main software module in the range of the project: a Process Management System developed for mobile devices
10. (June 2005 - December 2005) **MAIS** - *Multichannel Adaptive Information Systems*. The MAIS project investigated the concept of adaptation at all levels in information systems, from application level to network and device level. In particular, the requirements posed by multichannel information systems were studied. In the range of the MAIS Project, **Andrea Marrella led the realization of the prototype “Automatic Generation of User Interfaces” - report 7.3.8.**

Roma, 16 Agosto 2018

Firma.....



(non soggetta ad autenticazione ai sensi dell'art. 39 del D.P.R. 28.12.2000, n. 445)



# CHRISTIAN MORBIDONI

Curriculum Vitae Scientifico

Ancona (Italia)

22 Agosto, 2018

## BREVE BIOGRAFIA

Christian Morbidoni svolge la sua attività di ricerca e insegnamento presso la Facoltà di Ingegneria dell'Università Politecnica della Marche ad Ancona, dove ha ricoperto il ruolo di Ricercatore a Tempo Determinato (RTD-a) dal 2013 al 2018 e dove ha conseguito il titolo di dottore di ricerca nel 2006. Nel periodo dal 2006 al 2013 è stato assegnista di ricerca ed ha trascorso periodi in qualità di *visiting researcher* presso L3S ad Hannover nel 2005 e presso DERI a Galway nel 2009. Dal 2013 è docente del corso "Elementi di Informatica" presso la Facoltà di Ingegneria di Ancona.

Nel 2017 ha ottenuto l'abilitazione scientifica nazionale al ruolo di professore di seconda fascia nel settore concorsuale 09-H1.

I suoi interessi di ricerca comprendono Semantic Web, Knowledge Representation/Management, Digital Libraries, Digital Humanities, e più recentemente, Information Extraction/Retrieval, Recommender Systems e Machine Learning. Ha pubblicato in rilevanti conferenze internazionali (come ISWC e WWW) e riviste (come "Journal of Web Semantic", "Semantic Web Journal" e "Information Retrieval Journal").

Christian ha una consolidata esperienza nella scrittura e nella gestione, come *work package leader*, di progetti Europei e, dal 2013 al 2018, è stato responsabile di unità nel progetto "GramsciSource" finanziato dal MIUR attraverso il programma FIRB - Futuro in Ricerca.

Christian è stato co-fondatore di Sensible Logic SRL, ditta di consulenza specializzata in tecnologie semantiche, e dell'associazione Linked Open Data Italia.

## INFORMAZIONI GENERALI

NOME:  
DATA DI NASCITA:  
LUOGO DI NASCITA:  
CITTADINANZA:  
TELEFONO:  
E-MAIL:  
PEC:  
LINGUE PARLATE E SCRITTE:

## ABILITAZIONE SCIENTIFICA NAZIONALE (ASN)

[04/04/2017 - 04/04/2023]

Abilitazione Scientifica Nazionale al ruolo di professore di II fascia nel Settore Concorsuale 09/H1 - SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI.



## ISTRUZIONE

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- [21/12/2006] Dottorato di Ricerca in INGEGNERIA ELETTRONICA, INFORMATICA E DELLE TELECOMUNICAZIONI, Università Politecnica delle Marche, Ancona
- [11/12/2003] Laurea in INGEGNERIA ELETTRONICA, Università Politecnica delle Marche, Ancona

## ESPERIENZE LAVORATIVE

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- ACCADEMICHE [01/04/2018 - OGGI]  
Assegnista di ricerca  
Dipartimento di Ingegneria dell'Informazione, Facoltà di Ingegneria,  
Università Politecnica delle Marche, Ancona
- [21/03/2013 - 20/03/2018]  
Ricercatore a Tempo Determinato, tipologia (RTD-a)  
Dipartimento di Ingegneria dell'Informazione, Facoltà di Ingegneria,  
Università Politecnica delle Marche, Ancona
- [01/02/2012 - 31/01/2013]  
Assegnista di ricerca  
Dipartimento di Ingegneria dell'Informazione, Facoltà di Ingegneria,  
Università Politecnica delle Marche, Ancona
- [01/02/2007 - 30/11/2011]  
Assegnista di ricerca  
Dipartimento di Ingegneria dell'Informazione, Facoltà di Ingegneria,  
Università Politecnica delle Marche, Ancona
- ALTRO [2006, 2010]  
Co-fondatore, consulente, docente  
Sensible Logic S.R.L.
- [2002 - 2003]  
Tecnico informatico  
Facoltà di Economia, Università Politecnica delle Marche, Ancona

## ESPERIENZE DI INSEGNAMENTO

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- TITOLARITÀ DI CORSI UNIVERSITARI [A.A. 2013/2014 - A.A. 2017/2018]  
*Elementi di Informatica*  
Corso di Laurea triennale in Ingegneria Elettronica  
Corso di Laurea triennale in Ingegneria Biomedica  
Facoltà di Ingegneria,  
Università Politecnica delle Marche, Ancona
- [A.A. 2009/2010]  
*Tecniche per l'Informatica Distribuita*



Corso di Laurea in Magistrale in Ingegneria Informatica e  
dell'Automazione  
Facoltà di Ingegneria,  
Università Politecnica delle Marche, Ancona

[A.A. 2008/2009]

*Tecnologie per l'Informatica Distribuita*

Corso di Laurea in Magistrale in Ingegneria Informatica e  
dell'Automazione  
Facoltà di Ingegneria,  
Università Politecnica delle Marche, Ancona

ASSISTENZA  
IN CORSI  
UNIVERSITARI

[A.A. 2004/2005 - A.A. 2006/2007]

*Programmazione ad oggetti*

Corso di Laurea Magistrale in Ingegneria Informatica e dell'Automazione  
Facoltà di Ingegneria,  
Università Politecnica delle Marche, Ancona

ALTRO

[2013]

Docente del corso *Open Data*

Facoltà di Ingegneria, Università, Università Politecnica delle Marche  
(Corso rivolto al personale delle pubbliche amministrazioni)

## PROGETTI DI RICERCA FINANZIATI

[come PI-principal investigator o I-investigator]

GRAMSCISOURCE (PI)

TITOLO: GramsciSource: una piattaforma aperta e innovativa  
di supporto al lavoro degli studiosi e per la piena accessibilità  
dei testi gramsciani

DURATA: 2013 - 2018

FINAZIATO DA: Ministero dell'istruzione, dell'università e della  
ricerca (MIUR)

PROGRAMMA DI FINANZIAMENTO: FIRB - Futuro in ricerca

CODE: RBFR12MZ8R\_002

CUP: I31J12000270001

RESPONSABILITÀ: scrittura proposta, responsabile unità di ricerca,  
design e sviluppo software e supervisione team di sviluppo, data  
engineering

LINKS: <http://www.gramsciproject.org/>

DM2E (I)

TITOLO: DM2E, Digitised Manuscripts to Europeana

DURATA: 2012 - 2015

FINAZIATO DA: European Commission

PROGRAMMA DI FINANZIAMENTO: CIP

PROJECT REFERENCE: 297274

RESPONSABILITÀ: scrittura proposta, Work Package leader, stesura  
deliverables, sviluppo codice

LINKS: [http://cordis.europa.eu/project/rcn/191921\\_en.html](http://cordis.europa.eu/project/rcn/191921_en.html), <http://dm2e.eu/>

SEMLIB (I)

TITOLO: SEMLIB, Semantic Tools for Digital Libraries

DURATA: 2010 - 2012

FINAZIATO DA: European Commission

PROGRAMMA DI FINANZIAMENTO: FP7-SME

PROJECT REFERENCE: 262301

RESPONSABILITÀ: scrittura proposta, Work Package leader, stesura deliverables, software design, supervisione team di sviluppo

LINKS: [http://cordis.europa.eu/result/rcn/57391\\_en.html](http://cordis.europa.eu/result/rcn/57391_en.html)

DISCOVERY (I)

TITOLO: Discovery, Digital Semantic Corpora for Virtual Research in Philosophy

DURATA: 2006 - 2009

FINAZIATO DA: European Commission

PROGRAMMA DI FINANZIAMENTO: eContentplus

PROJECT REFERENCE: ECP-2005-CULT-038206

RESPONSABILITÀ: scrittura proposta, Work Package leader, stesura deliverables, software design, sviluppo software.

LINKS: <http://www.discovery-project.eu/>

EUROPEANA SOUNDS (I)

TITOLO: Europeana Sounds

DURATA: 2014 - 2017

FINAZIATO DA: European Commission

PROGRAMMA DI FINANZIAMENTO: CIP

PROJECT REFERENCE: 620591

RESPONSABILITÀ: scrittura della proposta, task leader, ontology engineering

LINKS: [http://cordis.europa.eu/project/rcn/191957\\_it.html](http://cordis.europa.eu/project/rcn/191957_it.html), <http://www.europeanasounds.eu/>

STOM (I)

TITOLO: STOM, Semlib to Market

DURATA: 2013 - 2016

FINAZIATO DA: European Commission

PROGRAMMA DI FINANZIAMENTO: FP7-SME

PROJECT REFERENCE: 606010

RESPONSABILITÀ: scrittura proposta, supervisione

LINKS: [http://cordis.europa.eu/project/rcn/188533\\_en.html](http://cordis.europa.eu/project/rcn/188533_en.html), <http://www.stom-project.eu/>

AGORA (I)

TITOLO: Agora, Scholarly Open Access Research in European Philosophy

DURATA: 2011 - 2014

FINAZIATO DA: European Commission

PROGRAMMA DI FINANZIAMENTO: CIP

PROJECT REFERENCE: 270904

RESPONSABILITÀ: scrittura proposta, coordinazione esperimenti, sviluppo codice

LINKS: [http://cordis.europa.eu/project/rcn/191888\\_en.html](http://cordis.europa.eu/project/rcn/191888_en.html)

HARTES (I)





TITOLO: hArtes, holistic approach to reconfigurable real time  
embedded system  
DURATA: 2006 - 2009  
FINAZIATO DA: European Commission  
PROGRAMMA DI FINANZIAMENTO: FP6-IST  
PROJECT REFERENCE: 035143  
LINKS: [https://cordis.europa.eu/project/rcn/79337\\_it.html](https://cordis.europa.eu/project/rcn/79337_it.html)  
RESPONSABILITÀ: supporto alle attività di ricerca

## ATTIVITÀ DI RICERCA

PERIODI DI RICERCA ALL'ESTERO	Visiting researcher al Learning Lab Lower Saxony (L3S) e al Distributed Systems Institute (KBS), Hannover, Germania da Settembre a Novembre 2005.  Visiting researcher al DERI, Galway, Irlanda, Ottobre 2009.
ORGANIZZAZIONE DI WORKSHOP E CONFERENZE	Organizzatore del primo Semantic Web Applications and Perspectives (SWAP 2004) (see <a href="http://dblp2.uni-trier.de/db/conf/swap/">http://dblp2.uni-trier.de/db/conf/swap/</a> ), Università Politecnica delle Marche, Ancona, e partecipazione al comitato scientifico delle seguenti edizioni del workshop SWAP (2005, 2006, 2007, 2008).  Organizzatore e chair del comitato scientifico del "6th International Workshop on Semantic Technologies for Information-Integrated Collaboration (STHC 2016)", parte della conferenza "International Conference on Collaboration Technologies and Systems (CTS 2016)", tenutasi dal 31 Ottobre al 4 Novembre 2016 a Orlando, Florida, USA.  Organizzatore e chair del comitato scientifico del "8th International Workshop on Machine Learning, Pattern Recognition and Applications (MLPRA 2018)", parte della conferenza "International Conference on High Performance Computing and Simulation (HPCS 2018)", tenutasi dal 16 al 20 Luglio 2018 a Orléans, Francia.  Organizzazione del Workshop on Social Interaction-based Recommendation (SIR 2018) presso la conferenza CIKM 2018, Torino, Italia, 28 Ottobre 2018
EDITOR	4th Semantic Web Applications and Perspectives (SWAP 2007) proceedings, <a href="http://ceur-ws.org/Vol-314/">http://ceur-ws.org/Vol-314/</a>
REVISORE	Revisione di articoli scientifici per le riviste: ACM Transactions on the Web (ISSN 15591131), Digital Studies / Le champ numérique (ISSN 1918-3666), Future Generation Computer Systems (ISSN: 0167-739X)



Revisore di articoli a conferenze: Workshop on Semantic Web Applications and Perspectives (SWAP) 2004, 2005, 2006, 2007, International Workshop on Semantic Technologies for Information-Integrated Collaboration (STIIC) 2016, Workshop on Social Aspects in Personalization and Search (SoAPS) @ ECIR 2018, International Conference on Neural Information Processing (ICONIP) 2018, International Conference on High Performance Computing & Simulation (HPCS) 2018

PRESENTAZIONI  
IN CONFERENZE  
INTERNAZIONALI

[2018] ACM/SIGAPP Symposium On Applied Computing (Pau, France)  
[2018] International Database Engineering and Applications Symposium (Villa san Giovanni, Italy)  
[2017] Somepas Workshop, 39th European Conference on Information Retrieval @ECIR 2017(Aberdeen, Scotland UK)  
[2017] International Workshop in Knowledge Discovery on the Web (Cagliari, Italy)  
[2015] European Semantic Web Conference (Portoroz, Slovenia)  
[2014] International Semantic Web Conference (Riva del Garda, Italy)  
[2013] International Workshop on Collaborative Annotations in Shared Environment: Metadata, Vocabularies and Techniques in the Digital Humanities @DocEng 2013 (Florence, Italy)  
[2012] International Workshop on Semantic Digital Archives (Paphos, Cyprus)  
[2011] International Workshop on Semantic Digital Archives (Berlin, Germany)  
[2009] International World Wide Web Conference (Madrid, Spain)  
[2008] European Semantic Web Conference (Tenerife, Spain)  
[2007] International cConference on Automated Solutions for Cross Media Content and Multi-channel Distribution (Barcelona, Spain)  
[2007] International Semantic Web Conference (Busan, Korea)  
[2006] International World Wide Web Conference (Edimburg, Scotland)  
[2005] International World Wide Web Conference (Chiba, Japan)  
[2005] ICCO Conference on Electronic Publishing (Leuven, Belgium)  
[2004] International World Wide Web Conference (New York, USA)

RELATORE  
INVITATO

[2014] Relatore invitato presso il convegno "Linked Open Data: where are we?", tenutosi dal 20 al 21 Febbraio 2014 a Roma, Italia, e organizzato da W3C Italia

[2012] Relatore invitato, come sviluppatore del software di annotazione web Pindit e come responsabile del Work Package 3 del progetto europeo DM2E, al "OpenGLAM workshop" parte del convegno OKFestival e tenutosi il 27 Settembre 2012 a Helsinki, Finlandia. L'argomento del workshop, organizzato da Open Knowledge Foundation (OKFN), è stato l'utilizzo dei Linked Data in ambito "Cultural Heritage".

[2012] Relatore invitato al seminario dal titolo "Linked Medieval Data" tenutosi a Firenze, Certosa del Galluzzo, presso l'Università degli Studi di Firenze, il 29 Settembre 2012.

[2011] Relatore invitato, come co-fondatore dell'associazione "Linked Open Data Italia", al convegno dal titolo "1st LAPSI Public Conference. PSI at the Crossroads: Current Challenges and New Opportunities", tenutosi dal 5 al 6 Maggio 2011 presso l'Università Bocconi, Milano, organizzato nell'ambito del progetto "LAPSI The European Thematic Network on Legal Aspects of Public Sector Information".



	<p>[2010] Relatore invitato, come promotore dell'iniziativa "Linked open Camera", presso il convegno "Fammi Sapere", tenutosi il 20 Novembre 2012 a Senigallia, Italia.</p>
CONVENZIONI DI RICERCA	<p>[2014] Responsabile scientifico della convenzione finalizzata alla collaborazione per lo sviluppo della ricerca dal titolo "Studio di vocabolari SKOS per la caratterizzazione del suono e della musica" della durata di 2 mesi. Attività affidata da impresa privata all'Università Politecnica delle Marche.</p> <p>[2016] Responsabile scientifico della convenzione finalizzata alla collaborazione per lo sviluppo della ricerca dal titolo "Studio e implementazione di prototipi innovativi per la gestione della mobilità urbana basati su tecnologia FIWARE" della durata di 6 mesi. Attività affidata da impresa privata all'Università Politecnica delle Marche.</p>
PREMI E RICONOSCIMENTI	<p>[2013] Primo premio alla competizione LODLAM Challenge 2013, organizzata presso il convegno "Linked Open Data in Libraries, Archives and Museums, LODLAM SUMMIT 2013" (<a href="http://summit2013.lodlam.net/challenge/">http://summit2013.lodlam.net/challenge/</a>), con l'applicazione Pundit, progettata ed implementata dall'unità di Ancona, risultato principale del progetto Europeo SEMLIB e successivamente esteso dal sottoscritto Christian Morbidoni, in collaborazione con Net7 S.R.L., nel contesto del progetto Europeo DM2E.</p> <p>[2006] Vincitore del terzo premio alla competizione "Semantic Web Challenge 2006" nell'ambito della International Semantic Web Conference, Athens, GA, USA, 2006, con il paper "Enabling Semantic Web Communities with DBin: An Overview" (scopus id: 2-s2.0-33845418914) e la relativa implementazione del sistema DBin.</p>
TRASFERIMENTO TECNOLOGICO	<p>[2006-2011] Socio co-fondatore della società SensibleLogic S.R.L., con la partecipazione di membri del gruppo di ricerca e finalizzata all'applicazione dei risultati della ricerca in ambito aziendale. Attività di consulenza, ricerca e sviluppo, sviluppo prototipi, corsi e seminari aziendali. Collaborazione in progetti pilota con partner aziendali di rilevanza nazionale (ENI, Monte dei Paschi di Siena, UBI Banca, Banca Sella).</p> <p>[2011] Socio co-fondatore dell'associazione Linked Open Data Italia, finalizzata alla divulgazione delle tecnologie Linked Data in ambito istituzionale e privato.</p>
ATTIVITÀ IN COMUNITÀ INTERNAZIONALI	<p>[2006 - 2010] Partecipazione al COST A-32 action (<a href="http://www.cost-a32.eu/wg-2.html">http://www.cost-a32.eu/wg-2.html</a>, <a href="http://www.cost.eu/COST_Actions/isch/A32">http://www.cost.eu/COST_Actions/isch/A32</a>), "Working Group 2: Software".</p> <p>[2006] Partecipazione al Semantic Desktop Hands-on Workshop, presso Department of Informatics (DFKI), Kaiserslautern University, Germany, Aprile 2006.</p> <p>[2006] Partecipazione al W3C Semantic Web Interest Group in Cannes France, Marzo 2006.</p>



[2006] Membro del Multimedia Semantics W3C Incubator Group (MMSEM, <http://www.w3.org/2005/Incubator/mmsem/>). Partecipazione al face-to-face meeting del working group presso CWI, Amsterdam, 10-11 Luglio 2006, e partecipazione alle audio conferenze periodiche.

[2011] Organizzazione e moderazione del "OpenData 4 Startups workshop" presso il convegno Frontiers of Interaction 2011, Firenze, Italy.

[2011] Relatore invitato al convegno dal titolo "1st LAPSI Public Conference. PSI at the Crossroads: Current Challenges and New Opportunities", tenutosi dal 5 al 6 Maggio 2011 presso l'Università Bocconi, Milano, organizzato nell'ambito del progetto "LAPSI The European Thematic Network on Legal Aspects of Public Sector Information".

[2012] Partecipazione al OKFest, Helsinki, Finland, <http://science.okfn.org/okfest/okfest-2012/>

[2014] Membro del comitato scientifico e relatore del convegno "LOD 2014, Linked Open Data, where we are?", organizzato in collaborazione con l'ufficio W3C italiano.

[2014] Mentor al Goole Summer of Code in 2014, in collaborazione con Wikimedia Foundation (project link: [https://www.mediawiki.org/wiki/Wikidata\\_annotation\\_tool](https://www.mediawiki.org/wiki/Wikidata_annotation_tool)).

[2012 - 2015] Presentazione dei risultati del progetto EU DM2E presso: "Open Data in Cultural Heritage workshop" (OKFest), 22 Settembre 2012, Helsinki, Finland; "The Web as Literature", 10 Giugno 2013, London, UK; "Wittgenstein Incubator Pundit training", 6 Dicembre 2013, Bergen, Norway; "Putting Linked Library Data to Work: the DM2E Showcase", 18 Novembre 2014, Vienna, Austria; "Enabling humanities research in the Linked Open Web - DM2E final event", 11 Dicembre, Navacchio, Italy

## DATI BILIOMETRICI

PAPERS [INTERNAZIONALI]: Numero: **45**<sup>1</sup> Database: **Scopus** Periodo: [2003-2018]  
PAPERS[NAZIONALI]: Numero: **1** Database: **Web of Science** Periodo: [2015]  
TOTAL IMPACT FACTOR (JOURNALS ONLY): **13.357**

	Google Scholar	Scopus	Scopus(escluse self-citations)
Citazioni totali:	870	414	349
Citazioni per prodotto:	11.2	9.2	7.7
Indice Hirsch (H):	16	10	8

<sup>1</sup>Un articolo è attualmente in fase di indicizzazione in Scopus



## PUBBLICAZIONI

### RIVISTE INTERNAZIONALI

- [1] Cucchiarelli, A., Morbidoni, C., Stilo, G., Velardi, P., A Topic Recommender for Journalists, (2018) *Information Retrieval Journal*, (DOI: 10.1007/s10791-018-9333-2)  
Journal IF: **1.735**
- [2] Baierer, K., Dröge, E., Eckert, K., Goldfarb, D., Iwanowa, J., Morbidoni, C., Ritze, D., DM2E: A Linked Data source of Digitised Manuscripts for the Digital Humanities (2017) *Semantic Web*, Volume 8, Issue 5, Pages 733-745  
(DOI: 10.3233/SW-160234)  
Journal IF: **2.889**
- [3] Quattrini, R., Pierdicca, R., Morbidoni, C., Knowledge-based data enrichment for HBIM: Exploring high-quality models using the semantic-web, (2017) *Journal of Cultural Heritage*, 28, pp. 129-139.  
(DOI: 10.1016/j.culher.2017.05.004)  
Journal IF: **1.706**
- [4] Grassi, M., Morbidoni, C., Nucci, M., Fonda, S., Piazza, F., Pundit: Augmenting web contents with semantics, (2013) *Literary and Linguistic Computing*, 28 (4), art. no. fqt060, pp. 649-659.  
(DOI: 10.1093/llc/fqt060)  
Journal IF: **0.525**
- [5] Grassi, M., Morbidoni, C., Nucci, M., A Collaborative Video Annotation System Based on Semantic Web Technologies, (2012) *Cognitive Computation*, 4 (4), pp. 497-514.  
(DOI: 10.1007/s12559-012-9172-1)  
Journal IF: **3.479**
- [6] Tummarello, G., Morbidoni, C., The DBin platform: A complete environment for Semantic Web Communities, (2008) *Web Semantics*, 6 (4), pp. 257-265.  
(DOI: 10.1016/j.websem.2008.08.002)  
Journal IF: **1.348**
- [7] Tummarello, G., Morbidoni, C., Puliti, P., Piazza, F., A proposal for textual encoding based on semantic web tools, (2008) *Online Information Review*, 32 (4), pp. 467-477.  
(DOI: 10.1108/14684520810897340)  
Journal IF: **1.675**

### CONFERENZE E WORKSHOP

- [8] Cucchiarelli, A., Morbidoni, C., Stilo, G., Velardi, P., What to Write and Why: a Recommender for News Media (2018), Proceedings of the 33rd Annual ACM Symposium on Applied Computing, Pau, France, April 9-13, 2018, p 1321-1330.  
(DOI: 10.1145/3167132.3167274)
- [9] Morbidoni, C., Cucchiarelli, A., Ursino, D., Leveraging linked entities to estimate focus time of short texts, Proceedings of the 22nd International Database Engineering and Applications Symposium (IDEAS 2018), pp. 282-286, Villa San Giovanni, Italy, 2018  
(DOI: 10.1145/3216122.3216158)
- [10] Quattrini, R., Pierdicca, R., Morbidoni, C., Malinverni, E.S., Conservation-oriented hbim. The bimexplorer web tool, (2017) *International Archives of the Photogrammetry, Remote Sensing and Spatial*



- [11] Cucchiarelli, A., Morbidoni, C., Stilo, G., Velardi, P., What to Write? A topic recommender for journalists, Proceedings of the 2017 EMNLP Workshop: Natural Language Processing meets Journalism, Copenhagen, Denmark, 2017  
(DOI: 10.18653/v1/W17-4204)
- [12] Morbidoni, C., Cucchiarelli, A., A bag-of-entities approach to document focus time estimation, 3rd International Workshop on Knowledge Discovery on the WEB (KDWEB), 2017
- [13] Stilo, G., Morbidoni, C., Cucchiarelli, A., Velardi, P., Capturing users' information and communication needs for the press officers, (2017) CEUR Workshop Proceedings, 1840, pp. 14-27, Workshop on Social Media for Personalization and Search, (SoMePeAS), 2017
- [14] Morbidoni, C., Piccioli, A., Curating a document collection via crowdsourcing with Pundit 2.0, (2015) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 9341, pp. 102-106, European Conference on Semantic Web, ESWC 2015, 2015  
(DOI: 10.1007/978-3-319-25639-9\_20)
- [15] Morbidoni, C., Linked Data and facets to explore text corpora in the Humanities: A case study, ISWC 2014 Posters and Demonstrations Track, ISWC-P and D 2014, 13th International Semantic Web Conference (ISWC), 2014
- [16] Di Donato, F., Morbidoni, C., Fonda, S., Piccioli, A., Grassi, M., Nucci, M., Semantic annotation with Pundit: A case study and a practical demonstration, (2013) ACM International Conference Proceeding Series, 1st International Workshop on Collaborative Annotations in Shared Environment: Metadata, Vocabularies and Techniques in the Digital Humanities, DH-CASE 2013, co-located with ACM DocEng, 2013  
(DOI: 10.1145/2517978.2517995)
- [17] Barbera, M., Meschini, F., Morbidoni, C., Tomasi, F., Annotating digital libraries and electronic editions in a collaborative and semantic perspective, (2013) Communications in Computer and Information Science, 354 CCIS, pp. 45-56., 8th Italian Research Conference on Digital Libraries (IRCDL), 2012  
(DOI: 10.1007/978-3-642-35834-0\_7)
- [18] Grassi, M., Morbidoni, C., Nucci, M., Fonda, S., Di Donato, F., Pundit: Creating, exploring and consuming semantic annotations, 3rd International Workshop on Semantic Digital Archives, SDA 2013 - co-located with 17th International Conference on Theory and Practice of Digital Libraries (TPDL), 2013
- [19] Grassi, M., Morbidoni, C., Nucci, M., Fonda, S., Ledda, G., Pundit: Semantically structured annotations for web contents and digital libraries, 2nd International Workshop on Semantic Digital Archives (SDA), 2012
- [20] Grassi, M., Morbidoni, C., Nucci, M., Semantic web techniques application for video fragment annotation and management, PINK SSPnet-COST 2102 International Conference on Analysis of Verbal and Nonver-



- [21] Morbidoni, C., Grassi, M., Nucci, M., Fonda, S., Ledda, G., Introducing the semlib project: Semantic web tools for digital libraries, 1st International Workshop on Semantic Digital Archives (SDA), 2011
- [22] Grassi, M., Morbidoni, C., Piazza, F., Towards semantic multimodal video annotation, 3rd COST 2102 International Training School on Toward Autonomous, Adaptive, and Context-Aware Multimodal Interfaces: Theoretical and Practical Issues, 2010  
(DOI: 10.1007/978-3-642-18184-9\_25)
- [23] Le-Phuoc, D., Polleres, A., Hauswirth, M., Tummarello, G., Morbidoni, C., Rapid prototyping of Semantic mash-ups through Semantic Web Pipes, (2009) WWW'09 - Proceedings of the 18th International World Wide Web Conference, pp. 581-590, 18th International World Wide Web Conference (WWW), 2009  
(DOI: 10.1145/1526709.1526788)
- [24] Barbera, M., Nucci, M., Hahn, D., Morbidoni, C., A Semantic Web powered distributed digital library system, (2008) Open Scholarship: Authority, Community, and Sustainability in the Age of Web 2.0 - Proceedings of the 12th International Conference on Electronic Publishing, ELPUB 2008, pp. 130-139, 12th International Conference on Electronic Publishing (ELPUB), 2008
- [25] Morbidoni, C., Le Phuoc, D., Polleres, A., Samwald, M., Tummarello, G., Previewing semantic web pipes, 5th European Semantic Web Conference (2008), 2008  
(DOI: 10.1007/978-3-540-68234-9\_70)
- [26] Morbidoni, C., Polleres, A., Tummarello, G., Who the FOAF knows Alice? RDF revocation in DBin 2.0, 4th Italian Workshop on Semantic Web Applications and Perspectives, SWAP 2007, 2007
- [27] Tummarello, G., Morbidoni, C., Collaboratively building structured knowledge with DBin: from delicious tags to an "RDFS Folksonomy", Workshop on Social and Collaborative Construction of Structured Knowledge, CKC 2007 - At the 16th International World Wide Web Conference (WWW), 2007
- [28] Tummarello, G., Morbidoni, C., Bachmann-Gmür, R., Erling, O., RDF-Sync: Efficient remote synchronization of RDF models, 6th International Semantic Web Conference, ISWC 2007 and 2nd Asian Semantic Web Conference (ASWC), 2007  
(DOI: 10.1007/978-3-540-76298-0\_39)
- [29] Morbidoni, C., Polleres, A., Tummarello, G., Who the FOAF knows alic? A needed step towards Semantic Web Pipes, 1st International Workshop on "New Forms of Reasoning for the Semantic Web: Scalable, Tolerant and Dynamic", Co-located with ISWC 2007 and ASWC 2007, 2007
- [30] Tummarello, G., Morbidoni, C., Nucci, M., Cyganiak, R., The DODA ontology: Lightweight integration of semantic data access technologies, (2006) CEUR Workshop Proceedings, 201, 3rd Italian Workshop on Semantic Web Applications and Perspectives (SWAP), 2006



- [31] Tummarello, G., Morbidoni, C., Nucci, M., Distributed creation and revision of domain knowledge based on Rich Semantic Web Clients, (2006) AAAI Fall Symposium - Technical Report, FS-06-06, pp. 62-69, 2006 AAAI Fall Symposium, 2006
- [32] Tummarello, G., Morbidoni, C., Nucci, M., Panzarino, O., Brainlets: "Instant" semantic web applications, (2006) CEUR Workshop Proceedings, 181, 2nd International Workshop on Scripting for the Semantic Web (SFSW), co-located with 3rd European Semantic Web Conference, 2006
- [33] Tummarello, G., Morbidoni, C., Nucci, M., Enabling semantic web communities with DBin: An overview, (2006) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 4273 LNCS, pp. 943-950, 5th International Semantic Web Conference (ISWC), 2006
- [34] Tummarello, G., Morbidoni, C., Kepler, F., Piazza, F., Puliti, P., A novel Textual Encoding paradigm based on Semantic Web tools and semantics, (2006) Proceedings of the 5th International Conference on Language Resources and Evaluation, LREC 2006, pp. 247-252, 5th International Conference on Language Resources and Evaluation (LREC), 2006
- [35] Tummarello, G., Morbidoni, C., Nucci, M., Piazza, F., Puliti, P., Rich personal semantic web clients: Scenario and a prototype, (2006) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 4248 LNAI, pp. 246-255, 15th International Conference on Knowledge Engineering and Knowledge Management (EKAW), 2006
- [36] Tummarello, G., Morbidoni, C., Piazza, F., Puliti, P., The DBin platform: Toward a personal tool to experience the Semantic Web, 2nd Italian Workshop on Semantic Web Applications and Perspectives, SWAP 2005, 2005
- [37] Tummarello, G., Morbidoni, C., Puliti, P., Piazza, F., Signing individual fragments of an RDF graph, 14th International World Wide Web Conference, WWW2005, pp. 1020-1021, 2005
- [38] Tummarello, G., Morbidoni, C., Puliti, P., Piazza, F., Semantic audio hyperlinking: A multimedia-semantic Web scenario, (2005) Proceedings - First International Conference on Automated Production of Cross Media Content for Multi-channel Distribution, AXMEDIS 2005, 2005, art. no. 1592076, pp. 111-114, 2005
- [39] Tummarello, G., Morbidoni, C., Pierazzo, E., Toward textual encoding based on RDF, (2005) From Author to Reader: Challenges for the Digital Content Chain - Proceedings of the 9th ICCI International Conference on Electronic Publishing, ELPUB 2005, pp. 57-63, 2005
- [40] Barbera, M., Di Donato, F., Tummarello, G., Morbidoni, C., HyperJournal, PHP scripting and Semantic Web technologies for the Open Access, Workshop on Scripting for the Semantic Web (SFSW), 2005
- [41] Tummarello, G., Morbidoni, C., Kourtesis, D., Piazza, F., Puliti, P., Toward MUI: Ontology assisted global identification of audio resources, 2nd Italian Workshop on Semantic Web Applications and Perspectives, SWAP 2005, 2005
- [42] Asirelli, P., Di Bono, M.G., Martinelli, M., Salvetti, O., Signore, O.,



- Catasta, M., Morbidoni, C., Piazza, F., Tummarello, G., Toward a scalable multimedia metadata infrastructure using distributed computing and semantic web technologies, (2005) IET Seminar Digest, 2005 (11099), pp. 153-156, 2nd European Workshop on the Integration of Knowledge, Semantics and Digital Media Technology( EWIMT), 2005
- [43] Tummarello, G., Morbidoni, C., Piazza, F., Puliti, P., MPEG7ADB: Automatic RDF annotation of audio files from low level low level MPEG-7 metadata, 4th International Workshop on Knowledge Markup and Semantic Annotation, SemAnnot 2004, Located at the 3rd International Semantic Web Conference, ISWC 2004, 2004
- [44] Tummarello, G., Morbidoni, C., Puliti, P., Dragoni, A.F., Piazza, F., From multimedia to the semantic web using MPEG-7 and computational intelligence, (2004) Proceedings of the Fourth International Conference on Web Delivering of Music, WEDELMUSIC 2004, pp. 52-59, 2004
- [45] Tummarello, G., Morbidoni, C., Petersson, J., Piazza, F., Puliti, P., RD-FGrowth, a P2P annotation exchange algorithm for scalable semantic web applications, (2004) CEUR Workshop Proceedings, 108, MobiQuitous 2004 Workshop on Peer-to-Peer Knowledge Management, P2PKM 2004, 2004
- [46] Tummarello, G., Morbidoni, C., Piazza, F., Enhancement of existing Web applications to support audio and musical tools, (2003) Proceedings - 3rd International Conference on WEB Delivering of Music, WEDELMUSIC 2003, pp. 31-34, 2003

Ancona, 22 Agosto, 2018

— Christian Morbidoni —



## Salvatore Pontarelli Curriculum Vitae

### I – Informazioni generali

Nome	Salvatore Pontarelli
Data di nascita	
Luogo di nascita	
Cittadinanza	
Indirizzo	
Telefono	
E-mail	
Lingue conosciute	

### II – Titoli

**A.A. 1998/99:** Laurea in Ingegneria Elettronica presso l'università degli studi di Bologna con una votazione finale di 95/100.

**A.A. 2002/03:** Dottore di Ricerca in Ingegneria delle Telecomunicazioni e Microelettronica.

**04/04/2017:** Abilitazione scientifica nazionale alle funzioni di professore di II fascia per il Settore concorsuale 09/H1 - Sistemi di Elaborazione delle Informazioni.

**05/04/2017:** Abilitazione scientifica nazionale alle funzioni di professore di II fascia per il Settore concorsuale 09/F2 – Telecomunicazioni.

### III – Posizioni ricoperte

Dal	al	Istituzione	Posizione
01-01-2014	Oggi	CNIT - Consorzio Nazionale Interuniversitario per le Telecomunicazioni	Senior Researcher
15-03-2017	15-09-2017	Telecom Paristech, Laboratory of Information, Networking and Communication Sciences, Paris, (FR)	Senior Researcher
01-09-2014	31-01-2015	University of Bristol (UK), Department of Computer Science.	Research Associate
01-07-2010	04-07-2013	Dipartimento di Ingegneria Elettronica dell'Università di Roma "Tor Vergata"	Assegnista di ricerca
02-06-2007	01-06-2010	Agenzia Spaziale Italiana	Assegnista di ricerca
02-05-2005	01-05-2007	Dipartimento di Ingegneria Elettronica dell'Università di Roma "Tor Vergata"	Assegnista di ricerca





#### IV – Attività didattica

A.A:	Istituzione	Corso
2002/2010	Università di Roma "Tor Vergata"	Laboratorio di Elettronica Digitale (professore a contratto)
2009/2012	Università di Roma "Tor Vergata"	Affidabilità dei Sistemi VLSI (professore a contratto)
2009/2011	Università di Roma "Tor Vergata"	"Sviluppo di sistemi embedded". Corso per i dottorati di ricerca in "Telecomunicazioni e Microelettronica", "Sistemi e Tecnologie dello Spazio", "Informatica e Ingegneria dell'Automazione".
2006/2012	Università di Roma "Tor Vergata"	Sistemi Elettronici Programmabili (esercitazioni)
2006/2012	Università di Roma "Tor Vergata"	Progettazione di Circuiti e Sistemi VLSI (esercitazioni)

#### V – Finanziamenti dei progetti di cooperazione e ricerca [grants]

02-03-2000 - 31-12-2002

"Sistema ad alta affidabilità tollerante ai guasti per applicazioni spaziali", finanziato dall'Agenzia Spaziale Italiana (ASI) (**Partecipante**)

01-06-2003 - 31-12-2006

"System On Chip (SOC) ad uso spaziale realizzati tramite circuiti integrati ad alta affidabilità e basso costo" finanziato dall'Agenzia Spaziale Italiana (ASI) (**Partecipante**)

01-01-2005 - 31-12-2006

"Tecniche per la valutazione dell'affidabilità e disponibilità di circuiti e sistemi digitali innovativi", (PRIN - 2004) (**Partecipante**).

01-01-2006 - 31-12-2007

"Soft Error in componenti logici programmabili", (PRIN - 2005) (**Partecipante**).

01-01-2009 - 31-03-2010

PRISM (PRIVacy-aware Secure Monitoring), EU 7th Framework Programme; **Responsabile del task** WP4.1: "Front-end Tier Implementation".

01-01-2009 - 31-12-2009

"Hi-Rel COTS Based on Board Computer" finanziato dall'ESA (European Space Agency). **Responsabile del Work Package** WP3400 "Survey of candidate memory devices".

01-01-2010 - 31-12-2012

"Sistemi digitali ad alta affidabilità e tolleranti ai guasti in tecnologie nanometriche: caratterizzazione e metodologie progettuali", (PRIN - 2008) (**Partecipante**).

01-01-2010 - 31-01-2012

DEMONS (DEcentralized, cooperative and privacy-preserving MONitoring for trustworthiness), EU 7th Framework Programme. (**Partecipante**).

01-01-2011 - 31-12-2015

**Grant Holder Representative, Italian Management Committee member** per la COST ACTION IC1103: "MEDIAN - Manufacturable and Dependable Multicore Architectures at Nanoscale".

01-01-2011 - 31-12-2011

"Bloom Filters for Error Detection and Correction in Binary/Ternary CAM" - CG#572188 finanziato da Cisco Systems tramite un Cisco Research Award. (**Primary Investigator**).

01-01-2011 - 31-12-2011

"Hi-Rel COTS Based on Board Computer-II", finanziato dall' ESA (**Partecipante**).

01-01-2012 - 31-12-2015

"Yield and reliability enhancement techniques for novel memory devices" finanziato dall'UK-EPRSC (United Kingdom - Engineering and Physical Sciences Research Council), (**co-PI**).

01-01-2013 - 31-12-2013

"Use of hash based structures for power saving in Ternary CAM" - CG# 575770 finanziato da Cisco Systems tramite un Cisco Research Award. (**Primary Investigator**).

01-09-2014 - 31-03-2015

DeSyRe - "on-Demand System Reliability", EU 7th Framework Programme. (**Partecipante**)

01-01-2015 - 31-03-2017

Progetto H2020 BeBa "Behavioural Based forwarding". **Responsabile dei task** T2.1: "Basic programming abstraction" e T2.2: "Extended XFSM-based API and flow computing engine".

01-07-2017 - now.

Progetto H2020 5G-PICTURE "Programmable Infrastructure Converging disaggregated neTwork and compUte Resources". **Responsabile del Work Package** WP3: " Data Plane Programmability and Infrastructure Components". **Responsabile del task** T7.1: " Standardisation, Dissemination and Exploitation".

## VI – Attività di ricerca

Parole chiave	Descrizione sintetica
Tolleranza ai guasti	L'attività di ricerca riguarda i metodi di progettazione ad alta affidabilità e resistenti ai guasti. In particolare sono stati progettati sistemi per lo spazio come memorie di massa a stato solido e processori ad alta affidabilità che sono stati utilizzati su diversi satelliti (GAIA, satelliti MTG-I). Inoltre sono stati sviluppati diversi metodi per il rilevamento dei guasti e per la protezione dei dispositivi FPGA e dei circuiti aritmetici.
Codici a correzione di errore	Tale attività si è concentrata in tre direzioni: i) sviluppo di metodi per la valutazione dell'affidabilità e dell'integrità dei dati nelle memorie a stato solido protette con codici di correzione di errore; ii) sviluppo di architetture ad alte prestazioni per la codifica e la decodifica; iii) sviluppo di algoritmi ed architetture tolleranti ai guasti per la codifica e la decodifica di codici di correzione di errore. Tale attività ha portato alla pubblicazione di numerosi

	articoli su riviste a diffusione internazionale (principalmente IEEE Transactions).
Processamento ad alta velocità di pacchetti della rete internet	L'attività di ricerca consiste nello sviluppo di metodi per il processamento ad alta velocità del traffico sulla rete internet. In particolare sono stati sviluppati diversi algoritmi ed architetture hardware (molti dei quali oggetto di brevetto internazionale) per la classificazione del traffico nei seguenti casi: i) exact matching per switch ethernet; ii) Longest Prefix Matching per router IP; iii) Access Control List per firewall di rete.
Strutture dati basate su hash	L'attività di ricerca consiste nella progettazione di strutture dati basate su hash ad alta efficienza. In particolare sono oggetto di studio: i) le strutture approssimate tipo Bloom filters, cuckoo filter e Invertible Bloom filters; ii) architetture hardware per la realizzazione di tabelle di hash ad alte prestazioni. Tale attività ha portato alla pubblicazione di diversi articoli su riviste a diffusione internazionale e a collaborazioni con prestigiosi atenei esteri (Harvard University).

## VII – Indici bibliometrici

Prodotto	Numero	Data Base	Dal	al
Articoli a diffusione internazionale	116	Scopus	2001	2018
Articoli su riviste a diffusione nazionale	1	Scopus	2001	2018
Libri	1	Scopus	2017	2018
Editoriali	5	Scopus	2013	2018
Brevetti	12	N/A	2016	2018

(Dati estratti il 26/06/2018 dal database scopus)

Numero di citazioni	756
Numero medio di citazioni	6
Hirsch (H) index	14

## VIII– Pubblicazioni selezionate per la valutazione di merito

1. M. Mitzenmacher, P. Reviriego, S. Pontarelli, "OMASS: One Memory Access Set Separation", *IEEE Transactions on Knowledge and Data Engineering*, vol. 28, Issue 7, July 2016, pp. 1940-1943.
2. S. Pontarelli, P. Reviriego, J.A. Maestro, "Improving Counting Bloom Filter Performance with Fingerprints", *Information Processing Letters*, vol. 116, Issue 4, April 2016, pp. 304-309.
3. S. Pontarelli, P. Reviriego, J.A. Maestro, "Parallel d-Pipeline: A Cuckoo Hashing Implementation for Increased Throughput", *IEEE Transactions on Computers*, vol. 65 no. 1, pp. 326-331, 2016.

4. S. Pontarelli, P. Reviriego, M. Ottavi, J.A. Maestro, "Low Delay Single Symbol Error Correction Codes based on Reed Solomon Codes" *IEEE Transactions on Computers*, vol. 64, no. 5, pp.1497-1501, 2015.
5. S. Pontarelli, P. Reviriego, M. Mitzenmacher, "Improving the Performance of Invertible Bloom Lookup Tables", *Information Processing Letters*, vol. 114, no. 4, pp. 185-191, 2014.
6. S. Pontarelli, P. Reviriego, J.A. Maestro "Efficient Flow Sampling with Back-annotated Cuckoo Hashing", *IEEE Communications Letters*, vol.18, no.10, pp.1695-1698, Oct. 2014.
7. S. Pontarelli, G. Bianchi, S. Teofili, "Traffic-aware Design of a High Speed FPGA Network Intrusion Detection System", *IEEE Transactions on Computers*, vol. 62, no. 11, pp. 2322-2334, Nov. 2013.
8. S. Pontarelli, P. Reviriego, C.J. Bleakley, J.A. Maestro, "Low Complexity Concurrent Error Detection for Complex Multiplication", *IEEE Transactions on Computers*, Vol. 62, no. 9, pp. 1899-1903, Sep. 2013.
9. P. Reviriego, S. Pontarelli, J.A. Maestro, M. Ottavi "A Method to Construct Low Delay Single Error Correction (SEC) Codes for Protecting Data Bits Only", *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, Vol. 32, no.3, pp. 479-483, 2013.
10. S. Pontarelli, M. Ottavi, "Error Detection and Correction in Content Addressable Memories by Using Bloom Filters", *IEEE Transactions on Computers*, Vol. 62, no. 6, pp. 1111-1126, May 2013.
11. P. Reviriego, S. Pontarelli, A. Evans, J.A. Maestro, "A Class of SEC-DED-DAEC codes derived from Orthogonal Latin Square Codes", *IEEE Transaction on VLSI systems*, vol. 23, no. 5, pp. 968-972, 2015.
12. P. Reviriego, S. Pontarelli, J.A. Maestro and M. Ottavi, "Concurrent Error Detection for Orthogonal Latin Squares Encoders and Syndrome Computation", *IEEE Transaction on VLSI systems*, vol. 21, no. 12, pp. 2334-2338, Dec 2013.

#### **IX – organizzazione di convegni di carattere scientifico in Italia o all'estero;**

01-05-2013 - 03-05-2013

**General chair:** "2nd Workshop on Manufacturable and Dependable Multicore Architectures at Nanoscale (MEDIAN)".

01-01-2014 al 31-09-2014

**Program chair:** IEEE Symposium on Defect and Fault Tolerance in VLSI systems, 2014,

01-10-2015 al 04-10-2015

**General chair:** "IEEE Symposium on Defect and Fault Tolerance in VLSI systems", 2015.

#### **Membro del Program Committee di:**

- IEEE Design Automation and Test Conference in Europe (DATE)
- IEEE International Conference on Advances in Computing and Communications (ICACC)
- IEEE International Conference on Computer Design (ICCD)
- IEEE International On-Line Test Symposium (IOLTS)
- IEEE Online Conference on Green Communications (OnlineGreenComm).

- IEEE Southern Programmable Logic Conference (SPL)
- IEEE Symposium on Defect and Fault Tolerance in VLSI systems (DFTS)
- International Conference on the Future Internet of Things and Cloud (FiCloud)
- International Workshop on FPGAs for Aerospace Applications (FASA)
- Joint Euro-TM/MEDIAN Workshop on Dependable Multicore and Transactional Memory Systems (DMTM)
- Workshop on High Performance and Programmable Networking (HPPN)
- Workshop on Manufacturable and Dependable Multicore Architectures at Nanoscale (MEDIAN)
- IEEE International Conference on High Performance Switching and Routing (HPSR)

**X- direzione o partecipazione a comitati editoriali di riviste.**

01-01-2013 - 31-12-2013

**Guest Editor:** Embedded Hardware Design Journal - Microprocessors and Microsystems, Elsevier. "Special Issue on Manufacturable and Dependable Multi-core Architectures at Nanoscale".

01-01-2014 - 31-12-2014

**Guest Editor:** *IEEE Transactions on Computers* e *IEEE Transactions on Nanotechnology*. Joint Special Section on Defect and Fault Tolerance in VLSI and Nanotechnology Systems.

01-01-2015 - ora

**Associate Editor:** *IEEE Transactions on nanotechnology*.

01-01-2016 - 31-12-2016

**Guest editor:** *IEEE Transactions on Emerging Topics in Computing*. Special section on "Defect and Fault Tolerance in VLSI and Nanotechnology Systems 2016".

**Revisore per le seguenti riviste: (in ordine alfabetico):**

- Elsevier, Journal of Electronic Testing: Theory and applications
- Elsevier, Microelectronic Journal
- Elsevier, Microelectronics Reliability
- Elsevier, The VLSI Journal
- IEEE Access
- IEEE Communication Letters
- IEEE Journal on Selected Areas in Communications
- IEEE Network Magazine
- IEEE Transactions on Circuits and Systems
- IEEE Transactions on Computers
- IEEE Transactions on Dependable and Secure Computing
- IEEE Transactions on Emerging Topics in Computing
- IEEE Transactions on Nanotechnology
- IEEE Transactions on Nuclear Science
- IEEE Transactions on Very Large Scale Integration Systems
- IET Circuits, Devices & Systems
- IET Electronics Letter

**XI – organizzazione, direzione e coordinamento di gruppi di ricerca nazionali e internazionali, o partecipazione agli stessi.**

2001- 2010





Partecipa alle attività di ricerca del gruppo DFT (Defect and Fault Tolerance) dell'università di Roma "Tor Vergata" diretto dal Prof. A. Salsano. Le attività di ricerca si sono concentrate sulla progettazione di sistemi digitali ad alta affidabilità per applicazioni spaziali.

2009 – oggi

Partecipa alle attività di ricerca e sviluppo hardware per l'unità di ricerca di Roma "Tor Vergata" del CNIT. Le attività di ricerca sono state focalizzate sulla progettazione di architetture hardware ed algoritmi per l'analisi del traffico sulla rete internet.

## **XII – Collaborazione con aziende**

### **(RDLabss.r.l.) WideBand Tuner (2006)**

Il Dott. Pontarelli ha partecipato allo sviluppo del firmware per un ricevitore a banda larga (30 MHz - 2 GHz) in grado di rilevare la direzione di provenienza del segnale.

### **(Syderal) PDHU-GAIA (2007)**

Nel 2007 il Dott. Pontarelli ha collaborato con Syderal SA, un'impresa svizzera specializzata nello sviluppo di sistemi digitali per satelliti, nello sviluppo del PDHU (Payload Data Handling Unit) da utilizzare nel satellite GAIA (Global Astrometric Interferometer for Astrophysics) sviluppato dall'Agenzia Spaziale Europea.

### **(Skytechnology S.R.L.) Offloader di protocolli di rete per transazioni finanziarie basati su FPGA (2010)**

Nel 2010 il Dott. Pontarelli ha collaborato con Skytechnology S.R.L., società di consulenza del settore ICT, per lo sviluppo su FPGA di un sistema per l'acquisizione e l'elaborazione a bassa latenza delle informazioni provenienti da protocolli di rete per transazioni finanziarie.

### **(Thales Alenia Space) 2015.**

Il Dott. Salvatore Pontarelli si è occupato della progettazione e della verifica funzionali dei blocchi hardware per la realizzazione di codici di correzione di errore di tipo Reed Solomon per la protezione di memorie SDRAM e Flash.

### **(Mellanox Technologies), 2015-oggi.**

Dal 2015 il Dott. Salvatore Pontarelli collabora con Mellanox Technologies sullo sviluppo di architetture hardware ed algoritmi per l'analisi, la classificazione e l'istradamento dei pacchetti della rete internet nei dispositivi di rete (switch, router, etc.).

## **XIII – Brevetti.**

[P1] US Patent Pending 14/827,373 - "EFFICIENT LOOKUP OF TCAM-LIKE RULES IN RAM", G. Levy, P. Reviriego, S. Pontarelli.

[P2] US Patent Pending 14/827,402 - "HIGH-PERFORMANCE BLOOM FILTER ARRAY", G. Levy, P. Reviriego, S. Pontarelli, E. Y. Kravchik.

[P3] US Patent Pending 14/846,777 - "CUCKOO HASHING WITH SELECTABLE HASH", G. Levy, P. Reviriego, S. Pontarelli.

[P4] US Patent Pending 15/086,095 - "SINGLE DOUBLE CUCKOO HASH", G. Levy, S. Pontarelli, P. Reviriego.



[P5] IT Patent Pending no. 102016000034641, "METHOD OF HANDLING DATA PACKETS THROUGH A CONDITIONAL STATE TRANSITION TABLE", G. Bianchi, S. Pontarelli, M. Bonola, A. Capone, C. Cascone.

[P6] US Patent Pending 15/186,477 "IP ROUTE CACHING WITH TWO SEARCH STAGES ON PREFIX LENGTH", F. Kravchik, P. Reviriego, S. Pontarelli, A. Kfir, A. Roitshtein, G. Levy.

[P7] US Patent Pending 15/186,562 "JUMP ON A MATCH OPTIMIZATION FOR LONGEST PREFIX MATCH USING A BINARY SEARCH TREE", G. Levy, A. Kfir, S. Pontarelli, P. Reviriego.

[P8] US Pending 15/257,957 "EFFICIENT MATCHING OF TCAM RULES USING HASH TABLES IN RAM", G. Levy, P. Reviriego, S. Pontarelli.

[P9] US Pending 15/469,530 "Field Checking Based Caching of ACL Lookups to Ease ACL Lookup Search", G. Levy, P. Reviriego, S. Pontarelli, A. Kfir.

[P10] US Pending 15/663,758, "Efficient Caching of TCAM like rules in SRAM", G. Levy, P. Reviriego, A. Kfir, S. Pontarelli.

#### **XIV– Lista completa delle pubblicazioni**

##### **XIV.a Libri (Editor)**

[B1] Marco Ottavi, Dimitris Gizopoulos, Salvatore Pontarelli, "Dependable Multicore Architectures at Nanoscale", Springer-Verlag, ISBN: 3319544217.

##### **XIV.b Capitoli di libro**

[Bc1] "Emerging Nanotechnologies: Test, Defect Tolerance and Reliability", Springer, ISBN: 9780387747460. "Chapter 8: QCA Circuits for Robust Coplanar Crossing", S. Bhanja, M. Ottavi, S. Pontarelli, and F. Lombardi.

[Bc2] "Trustworthy Internet", Luca Salgarelli, Giuseppe Bianchi, Nicola Blefari-Melazzi, (Eds.) Springer, ISBN 978-8847018174. "Chapter 2: IDS Rules adaptation for packets pre-filtering in gbps line rates", S. Teofili, E. Nobile, S. Pontarelli, G. Bianchi.

[Bc3] "Nanoelectronic Device Applications Handbook", CRC Press, ISBN: 978-1466565234, "Chapter 17: Modeling Magnetic Quantum-Dot Cellular Automata by HDL", M. Ottavi, S. Pontarelli, A. Salsano, F. Lombardi.

[Bc4] "Applications in Electronics Pervading Industry, Environment and Society", Alessandro De Gloria (Ed.), Lecture Notes in Electrical Engineering, Volume 289, ISBN: 978-3319043692, "Chapter 13: A Reconfigurable Functional Unit for Modular Operations", G.C. Cardarilli, L. Di Nunzio, R. Fazzolari, S. Pontarelli, M. Re.

[Bc5] "Dependability Solutions", Salvatore Pontarelli, Pedro Reviriego, Juan Antonio Maestro, in "Dependable Multicore Architectures at Nanoscale", Springer-Verlag, ISBN: 3319544217.

#### XIV.c Riviste

- [J1] S. Bertazzoni, G.C. Cardarilli, D. Di Giovenale, M. Ottavi, S. Pontarelli, A. Salsano, P. Marinucci, "Sistemi elettronici tolleranti ai guasti per applicazioni spaziali", *Alta Frequenza Rivista di Elettronica*, vol. 13, n. 3, June 2001.
- [J2] G.C. Cardarilli, A. Leandri, P. Marinucci, M. Ottavi, S. Pontarelli, M. Re, A. Salsano, "Design of a Fault Tolerant Solid State Mass Memory", *IEEE Transactions on Reliability*, vol. 52, n. 4, pp. 476-491, December 2003.
- [J3] G.C. Cardarilli, F. Lombardi, M. Ottavi, S. Pontarelli, M. Re, A. Salsano, "Comparative Evaluation of Designs for Reliable Memory Systems", *Journal of Electronic Testing: Theory and Applications*, August 2005.
- [J4] G.C. Cardarilli, M. Ottavi, S. Pontarelli, M. Re, A. Salsano, "A Fault Tolerant Solid State Mass Memory For Space Applications", *IEEE Transaction on Aerospace and Electronic System*, vol. 41, n. 4, October 2005.
- [J5] G.C. Cardarilli, M. Ottavi, S. Pontarelli, M. Re, A. Salsano, "Fault localization, error correction, and graceful degradation in radix 2 signed digit-based adders", *IEEE Transactions on Computers*, Volume 55, no. 5, pp. 534 – 540, May 2006
- [J6] Ottavi, M.; Pontarelli, S.; Vankamamidi, V.; Salsano, A.; Lombardi, F.; "QCA memory with parallel read/serial write: design and analysis", *IEE Circuits, Devices and Systems*, Volume 153, Issue 3, pp. 199 – 206, June 2006.
- [J7] S. Bhanja, M. Ottavi, S. Pontarelli, F. Lombardi, "QCA Circuits for Robust Coplanar Crossing", *Journal of Electronic Testing: Theory and Applications*, vol. 23, no. 2-3, pp. 193-210 June 2007.
- [J8] G.C. Cardarilli, S. Pontarelli, M. Re, A. Salsano, "Analysis of Errors and Erasures in Parity Sharing RS Codecs", *IEEE Transactions on Computers*, Vol. 56, No. 12, pp. 1721-1726, Dec. 2007.
- [J9] G.C. Cardarilli, S. Pontarelli, M. Re, A. Salsano, "Concurrent Error Detection in Reed Solomon Encoders and Decoders", *IEEE Transactions on Very Large Scale Integration Systems*, Volume 15 n. 7, pp. 842 – 846, July 2007.
- [J10] M. Violante, L. Sterpone, A. Manuzzato, S. Gerardin, P. Rech, M. Bagatin, A. Paccagnella, C. Andreani, G. Gorini, A. Pietropaolo, G. Cardarilli, S. Pontarelli, C. Frost, "A new hardware/software platform and a new 1/E neutron source for soft error studies: testing FPGAs at the ISIS facility", *IEEE Transaction on Nuclear Science*, Volume 54, Issue 4, Part 2, pp. 1184 – 1189 Aug. 2007.
- [J11] S. Pontarelli, M. Ottavi, V. Vankamamidi, G.C. Cardarilli, F. Lombardi, A. Salsano, "Analysis and Evaluations of Reliability of Reconfigurable FPGAs", *Journal of Electronic Testing: Theory and Applications*, Vol. 24, no. 1-3, June 2008.
- [J12] M. Ottavi, S. Pontarelli, E.P. DeBenedictis, A. Salsano, S. Murphy, P. Kogge, F. Lombardi "Partially reversible pipelined QCA circuits: combining low power with high throughput", *IEEE Transactions on nanotechnology*, vol. 10, no 6, pp. 1383-1393, 2011.

- [J13] S. Pontarelli, G. C. Cardarilli, M. Re, A. Salsano "Optimized implementation of RNS FIR Filters based on FPGAs", *Springer Journal of Signal Processing Systems*, Vol. 67, no. 3, pp 201-212, June 2012.
- [J14] S. Pontarelli, A. Salsano "On the use of Karatsuba formula to detect errors in  $SGF((2^n)^2)$  multipliers", *IET Circuits, Devices & Systems*, Vol. 6, no. 3, pp. 152-158, 2012.
- [J15] P. Reviriego, S. Pontarelli, C.J. Bleakley, J.A. Maestro "Area efficient concurrent error detection and correction for parallel filters", *IET Electronics Letters*, Vol. 48, no. 20, p.1258–1260, Set 2012.
- [J16] P. Reviriego, S. Pontarelli, J.A. Maestro and M. Ottavi, "Low Cost Single Error Correction Multiple Adjacent Error Correction Codes", *IET Electronics Letters*, Vol. 48 no. 23, pp. 1470-1472, Nov. 2012.
- [J17] S. Pontarelli, M. Ottavi, "Error Detection and Correction in Content Addressable Memories by Using Bloom Filters", *IEEE Transactions on Computers*, Vol. 62, no. 6, pp. 1111–1126, 2013.
- [J18] P. Reviriego, S. Pontarelli, J.A. Maestro, M. Ottavi "A Method to Construct Low Delay Single Error Correction (SEC) Codes for Protecting Data Bits Only", *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, Vol. 32, no.3, pp. 479-483, 2013.
- [J19] P. Reviriego, S. Pontarelli, J.A. Maestro and M. Ottavi, "Reducing the Cost of Implementing Error Correction Codes in Content Addressable Memories", *IEEE Transactions on Circuits and Systems II: Express Briefs*, Vol. 60, no. 7, pp.432-436, Jul. 2013.
- [J20] S. Pontarelli, P. Reviriego, C.J. Bleakley, J.A. Maestro, "Low Complexity Concurrent Error Detection for Complex Multiplication", *IEEE Transactions on Computers*, Vol. 62, no. 9, pp. 1899-1903, Sep. 2013.
- [J21] P. Reviriego, O. Ruano, M. F. Flanagan, S. Pontarelli and J. A. Maestro, "An Efficient Technique to Protect Serial Shift Registers against Soft Errors," *IEEE Transactions on Circuits and Systems II: Express Briefs*, vol. 60, no.8, pp. 512-516, Aug. 2013.
- [J22] P. Reviriego, S. Pontarelli, J.A. Maestro and M. Ottavi, "Reducing the Cost of Single Error Correction with Parity Sharing", *IEEE Transactions on Device and Materials Reliability*, vol. 13, no. 3, pages 420-422, Sep. 2013.
- [J23] S. Pontarelli, G. Bianchi, S. Teofili, "Traffic-aware Design of a High Speed FPGA Network Intrusion Detection System", *IEEE Transactions on Computers*, vol. 62, no. 11, pp. 2322-2334, Nov. 2013.
- [J24] P. Reviriego, S. Pontarelli, J.A. Maestro and M. Ottavi, "Concurrent Error Detection for Orthogonal Latin Squares Encoders and Syndrome Computation", *IEEE Transaction on VLSI*, vol. 21, no. 12, pp. 2334-2338, Dec 2013.
- [J25] P. Reviriego, S. Pontarelli, J.A. Maestro and M. Ottavi, "Efficient Implementation of Error Correction Codes in Hash Tables", *Microelectronics Reliability*, vol. 54, no. 1, pp. 338-340, 2014.
- [J26] P. Reviriego, S. Pontarelli, J.A. Maestro, "Optimized Decoding of Odd-Weight Single Error Correction Double Error Detection (SEC-DED) Codes with 64 Bits", *IET Electronics Letters*, vol. 49, no. 25, pp. 1617-1618, 2013.



- [J27] S. Pontarelli, P. Reviriego, M. Mitzenmacher, "Improving the Performance of Invertible Bloom Lookup Tables", *Information Processing Letters*, vol. 114, no. 4, pp. 185-191, 2014.
- [J28] Y. Lu, F. Lombardi, S. Pontarelli, M. Ottavi, "Design and Analysis of Single Event Tolerant Slave Latches for Enhanced Scan Delay Testing", *IEEE Transactions on Device and Materials Reliability*, vol. 14, no. 1, pp. 333-343, 2014.
- [J29] P. Reviriego, S. Pontarelli, J.A. Maestro, "Energy Efficient Exact Matching for Flow Identification with Cuckoo Affinity Hashing", *IEEE Communications Letters*, vol. 18, no. 5, pp. 885-888, 2014.
- [J30] P. Reviriego, A. Sánchez-Macián, S. Pontarelli, and J.A. Maestro, "A Method to Extend Orthogonal Latin Square Codes", to appear on *IEEE Transactions on VLSI*.
- [J31] K. Namba, S. Pontarelli, M. Ottavi, F. Lombardi, "A single-bit and double-adjacent error correcting parallel decoder for multiple-bit error correcting BCH codes", to appear on *IEEE Transactions on Device and Materials Reliability*.
- [J32] P. Reviriego, S. Pontarelli, J.A. Maestro and M. Ottavi, "Synergetic Use of Bloom Filters for Error Detection and Correction" to appear on *IEEE Transaction on VLSI systems*.
- [J33] P. Reviriego, S. Pontarelli, A. Evans, J.A. Maestro, "A Class of SEC-DED-DAEC codes derived from Orthogonal Latin Square Codes", *IEEE Transaction on VLSI systems*, vol. 23, no. 5, pp. 968-972, 2015.
- [J34] S. Pontarelli, P. Reviriego, M. Ottavi, J.A. Maestro, "Low Delay Single Symbol Error Correction Codes based on Reed Solomon Codes" *IEEE Transaction on Computers*, vol. 64, no. 5, pp.1497-1501, 2015.
- [J35] P. Reviriego, J. Martinez, S. Pontarelli, J.A. Maestro, "A Method to Design SEC-DED-DAEC codes with Optimized Decoding", *IEEE Transactions on Device and Materials Reliability*, vol.14, no.3, pp.884-889, Sept. 2014.
- [J36] P. Reviriego, S. Pontarelli, M. Ottavi, J.A. Maestro "FastTag: A Technique to Protect Cache Tags against Soft Errors", *IEEE Transactions on Device and Materials Reliability*, vol.14, no.3, pp.935-937, Sept. 2014.
- [J37] M. Ottavi, S. Pontarelli, D. Gizopoulos, C. Bolchini, M. Michael, L. Anghel, M. Tahoori, A. Paschalis, P. Reviriego, O. Bruggmann, V. Izosimov, H. Manhaeve, C. Strydis, and S. Hamdioui. "Dependable Multicore Architectures at Nanoscale and their Applications: the view from Europe", *IEEE Design & Test*, vol.32, no.2, pp.17-28, April 2015.
- [J38] S. Pontarelli, P. Reviriego, J.A. Maestro "Efficient Flow Sampling with Back-annotated Cuckoo Hashing", *IEEE Communications Letters*, vol.18, no.10, pp.1695-1698, Oct. 2014.
- [J39] L.-J. Saiz-Adalid, P. Reviriego, P. Gil, S. Pontarelli and J.A. Maestro "MCU Tolerance in SRAMs through Low Redundancy Triple Adjacent Error Correction", *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, vol.23, no.10, pp. 2332-2336, Oct. 2015.
- [J40] G. Li, J. Mathew, R. Shafik, D. K. Pradhan, M. Ottavi and S. Pontarelli, "Lifetime Reliability Analysis of Complementary Resistive Switches under Threshold and Doping Interface Speed Variations", *IEEE Transactions on nanotechnology*, vol. 14, no. 1, pp. 130-139, 2015.



- [J41] Y. Yang, J. Mathew, M. Ottavi, S. Pontarelli, D. K. Pradhan, "Novel Complementary Resistive Switch Crossbar Memory Write and Read Schemes", *IEEE Transactions on nanotechnology*, vol. 14, no. 2, pp. 346-357, 2015.
- [J42] Y. Yang, J. Mathew, M. Ottavi, S. Pontarelli, D. K. Pradhan, "Complementary Resistive Switch Based Arithmetic Logic Implementations Using Material Implication", *IEEE Transactions on Nanotechnology*, vol. 15, Issue 1, January 2016, pp. 94-108.
- [J43] M. Bonola, G. Bianchi, G. Picierro, S. Pontarelli, M. Monaci, "StreaMon: a data-plane programming abstraction for Software-defined Stream Monitoring", *IEEE Transactions on Dependable and Secure Computing*, Volume 14, Issue 6, November-December 2017, pp. 664-678.
- [J44] S. Pontarelli, P. Reviriego, J.A. Maestro, "Improving Counting Bloom Filter Performance with Fingerprints", *Information Processing Letters*, vol. 116, Issue 4, April 2016, pp. 304-309.
- [J45] S. Pontarelli, P. Reviriego, J.A. Maestro, "Parallel d-Pipeline: A Cuckoo Hashing Implementation for Increased Throughput", *IEEE Transactions on Computers*, vol. 65 no. 1, pp. 326-331, 2016.
- [J46] M. Mitzenmacher, P. Reviriego, S. Pontarelli, "OMASS: One Memory Access Set Separation", *IEEE Transactions on Knowledge and Data Engineering*, vol. 28, Issue 7, July 2016, pp. 1940-1943.
- [J47] S. Pontarelli, P. Reviriego, "Cuckoo Cache a Technique to Improve Flow Monitoring Throughput", *IEEE Internet Computing*, vol. 20, Issue 4, July/August 2016, pp. 46-53.
- [J48] P. Reviriego, S. Pontarelli, J.A. Maestro, "A Method to Protect Cuckoo Filters from Soft Errors", *Microelectronic Reliability*, vol 72, May 2017, pp. 85-89.
- [J49] G. Levy, S. Pontarelli, P. Reviriego, "Flexible Packet Matching with Single Double Cuckoo Hash", *IEEE Communications Magazine*, Volume 55, Issue 6, May 2017, pp. 212-217.
- [J50] C. Cascone, R. Bifulco, S. Pontarelli, A. Capone, "Relaxing state-access constraints in stateful programmable data planes", *ACM SIGCOMM Computer Communication Review*, Volume 48, Issue 1, pp 3-9.
- [J51] A Ullah, P Reviriego, S Pontarelli, JA Maestro "Majority Voting-based Reduced Precision Redundancy Adders", *IEEE Transactions on Device and Materials Reliability*, Vol. 18, Issue 1, pp. 122-124.
- [J52] S. Pontarelli, P. Reviriego, M. Mitzenmacher, "EMOMA: Exact Match in One Memory Access", *IEEE Transactions on Knowledge and Data Engineering*, Year: 2018, (*Early Access*).
- [J53] S. Pontarelli, M. Bonola, G. Bianchi "Smashing OpenFlow's "atomic" actions: programmable data plane packet manipulation in hardware", *International Journal of Network Management*, John Wiley & Sons. (*in press*)

#### XIV.d Editoriali

- [E1] C. Bolchini, S. Pontarelli, L. Anghel, D. Gizopoulos, *Proceedings of the 2nd Workshop on Manufacturable and Dependable Multicore Architectures at Nanoscale (MEDIAN'13)*, TIMA (ISBN: 978-2-11129175-1), Avignon, France, May 30-31, 2013.

[E2] L. Anghel, C. Bolchini, S. Pontarelli, "Special Section on Manufacturable and Dependable Multi-core Architectures at Nanoscale (MEDIAN)", *Microprocessors and Microsystems: Embedded Hardware Design*, Elsevier, Vol. 38, no. 6, Aug. 2014.

[E3] S. Hamdioui, S. Kundu, M. Ottavi, S. Pontarelli, (eds), *Proceedings of the 17th IEEE Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems*, IEEE Computer Society, Amsterdam, The Netherlands, Oct. 1-3, 2014.

[E4] S. Kundu, S. Pontarelli, (eds), *Proceedings of the 18th IEEE Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems*, IEEE Computer Society, Amherst, Massachusetts, US, Oct. 12-14, 2015.

[E5] C. Bolchini, S. Kundu, S. Pontarelli, "Guest Editors' Introduction: TC/TNANO Joint Special Section on Defect and Fault Tolerance in VLSI and Nanotechnology Systems", published in *IEEE Transactions on nanotechnology*, vol. 15, no. 2, pp. 130-139, 2016 and in *IEEE Transactions on Computers*, vol. 65 no. 3, pp. 677-678.

[E6] M. Ottavi, D. Gizopoulos, S. Pontarelli, "Preface", in "Dependable Multicore Architectures at Nanoscale", Springer-Verlag, ISBN: 3319544217.

#### XIV.e Atti di conferenze

[C1] M. Ottavi, G.C. Cardarilli, P. Marinucci, S. Pontarelli, M. Re, A. Salsano, "Development of a dynamic routing system for a fault tolerant solid state mass memory", in Proceedings of the IEEE International Symposium on Circuits and Systems, ISCAS 2001, Sydney, Australia, May 2001.

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Roma, 23-Agosto-18

  
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Salvatore Pontarelli



## CURRICULUM VITAE

### Part IA – General Information

Name and Surname	Tatiana Tommasi
Date of Birth	
Place of Birth	
Citizenship	
Permanent Address	
Mobile Phone Number	
E-mail	
Spoken Languages	

### Part IB – Short Bio

I'm a researcher at the Italian Institute of Technology (IIT) since October 2017. Previously I was RTD-A at the Department of Computer, Control, and Management Engineering "Antonio Ruberti" (DIAG) at Sapienza Rome University. Before that, I spent two post-doctoral periods at UNC Chapel Hill, NC (USA), and KU Leuven (Belgium). In 2013 I defended my PhD thesis in Electrical Engineering at the École Polytechnique Fédérale de Lausanne (EPFL), Switzerland. The thesis was selected by the jury members as candidate to the prestigious ABB award that acknowledges innovative and high level research. During my PhD I worked as a research assistant at the Idiap Research Institute (Martigny, Switzerland). I studied Physics at Sapienza Rome University, Italy, where I ranked in the top 5% students graduated in 2004. In 2008 I received a Postgraduate Degree in Medical Physics at the same University and I was awarded of scholarship as one of the top 3 best students entering the Medical Physics Specialization School in 2005.

My main research interests are computer vision and machine learning with applications in the domain of open ended learning systems, robotics and medical imaging. I've also been extending my experience to natural language processing and multi-modal visual-text interaction while at UNC. My main work on transfer learning was published as a Pattern Analysis and Machine Intelligence (PAMI) journal in 2014. An initial part of it was presented at the Computer Vision and Pattern Recognition conference (CVPR) in 2010 and it won the best poster award in the same year at the INRIA Visual Recognition and Machine Learning Summer School. My work on the definition of a cross-dataset testbed for large scale analysis of dataset bias won the best paper award at the TASK-CV workshop at ECCV 2014. I proposed a principled algorithms for the automatic annotation of x-ray images, which resulted into two successful participations to the international ImageCLEF challenge in 2007 and 2008. My first journal publication describing the approach proposed for the medical annotation task received the Idiap best paper award in 2008.

I've been involved in teaching and education activities starting from my PhD period: I supervise bachelor and master students since 2011, I've taught a master thesis course on probability and statistics at Sapienza Rome University during the academic year 2016-2017 and I was member of the Doctoral School in Information Engineering of the same University 2017. I previously collaborated to the computer vision master class teaching at UNC and worked as teaching assistant for a PhD course at EPFL. I'm co-organizer of the transfer learning workshop at ECCV 2018 as well as of its previous editions at ICCV (2015, 2017) and NIPS (2013, 2014). I took part to the organization of the ImageCLEF challenge in 2009, and taught a tutorial on transfer learning and domain adaptation at ECCV 2014. I'm an active program committee member of several top international computer vision and machine learning conferences, I'm also often invited to serve as expert reviewer for top journals and as external PhD jury member. I've also been co-editor of the JMLR special Topic on Multi-Task Learning, Domain Adaptation and Transfer Learning.

### Part IC – Scientific Indicators

**Italian Habilitations to the rank of Associate Professor in Computer Science and in Computer Engineering [Abilitazione MIUR - II Fascia - Settori Concorsuali: 09/H1 (scad. 26/7/2024), 01/B1 (scad. 7/8/2024)]**

Scopus ([www.scopus.com](http://www.scopus.com)) indicates for Tatiana Tommasi:  
number of documents by the author: 34, number of total citations: 507, H-index: 11

Web of Science - Journal Citation Reports (<https://jcr.incites.thomsonreuters.com/>) indicates for Tatiana Tommasi:  
total impact factor: 28.88

Google Scholar (<https://scholar.google.com>) indicates for Tatiana Tommasi:  
number of documents by the author: 49, number of total citations: 1041, H-index: 17



## Part II – Education

Type	Year	Institution	Notes (Degree, Experience)
PhD	2013	École Polytechnique Fédérale de Lausanne - EPFL (Switzerland)	<b>PhD in Electrical Engineering</b> Thesis: "Learning to Learn by Exploiting Prior Knowledge" <b>The thesis work was selected by the PhD jury members as candidate to the ABB (Asea Brown Boveri) award that acknowledges innovative and high level research.</b>  Decreto di Equipollenza MIUR, num. 2068 del 2/8/2018
Post-graduate studies	2008	Sapienza Rome University (Italy)	<b>Specialization School in Medical Physics</b> Thesis: "Multiple Cue Integration for Medical Image Annotation" Grade: 70/70 cum laude
University graduation	2004	Sapienza Rome University (Italy)	<b>Master Degree in Physics</b> (Laurea vecchio ordinamento) Thesis: "Color study of skin lesions' images for the identification of melanoma's characteristics" Grade: 110/110 cum laude

## Part III – Appointments

### IIIA – Academic Appointments

Start	End	Institution	Position
01/10/2017	Today	Italian Institute of Technology Milan (Italy)	<b>Researcher (co.co.co)</b> <ul style="list-style-type: none"> <li>Collaborating to the project "<u>Open Set Domain Adaptation on Semantic and Perceptual Data</u>": developing methods for domain discovery, adaptation and generalization by exploiting Web data</li> </ul>
23/08/2016	30/09/2017	Sapienza Rome University Department DIAG (Italy)	<b>Ricercatore a Tempo Determinato - A Settore Concorsuale 09/H1, Settore Scientifico Disciplinare ING-INF/05</b> <ul style="list-style-type: none"> <li>Collaborating to the project "<u>Unconstrained and dynamic domain adaptation from semantic and 3D perceptual data</u>": developing methods for localizing the image regions more responsible for the variation across visual domains</li> </ul>
15/04/2015	22/07/2016	University of North Carolina (UNC) at Chapel Hill (USA) Computer Science Department	<b>Postdoctoral Research Associate</b> <u>Main Topic: Visual Question Answering</u> <ul style="list-style-type: none"> <li>Image and text integration for multiple-choice question answering</li> <li>Amazon Mechanical Turk text and visual data collection</li> <li>Natural Language Processing for text parsing and semantic Understanding</li> </ul>
01/05/2013	31/03/2015	KU Leuven Department ESAT (Belgium)	<b>Postdoctoral Fellow (Scholarship)</b> <u>Topic: Visual object classification and retrieval</u> <ul style="list-style-type: none"> <li>Workpackage Leader for the AXES European Project: collaboration with BBC and Deutsche Welle for the definition of interactive approaches to search through large audio-video archives.</li> </ul> <u>Topic: User personalization and advertisement</u> <ul style="list-style-type: none"> <li>Workpackage Leader for the PARIS project: personalised advertisements built from web sources: users interest identification from multi-media content saved on the social media Pinterest.</li> </ul> <u>Topic: Learning across visual domains</u> <ul style="list-style-type: none"> <li>Alignment of twelve existing image datasets for the definition of a large scale cross-domain image repository.</li> </ul>



01/02/2008	30/04/2013	Idiap Research Institute Martigny (Switzerland)	<p>Organization of a benchmark campaign (<a href="https://sites.google.com/site/crossdataset/">https://sites.google.com/site/crossdataset/</a>).</p> <ul style="list-style-type: none"> <li>▪ Fine grained object classification and location recognition over large time lags.</li> </ul>
1/06/2011	30/09/2011	Institute of Science and Technology Austria - IST (Austria)	<p><b>Research Assistant</b></p> <p><u>Main Topic: Learning from few images, cue integration</u></p> <ul style="list-style-type: none"> <li>▪ Transfer Learning across visual object categories;</li> <li>▪ Combining visual features (shape, colour, texture) and cross-modal information (motor and visual for object grasping);</li> </ul> <p><b>Visiting Researcher</b></p> <p><u>Main Topic: Transferring information across partially related tasks</u></p> <ul style="list-style-type: none"> <li>▪ Learning a metric shared between tasks and reusing it on a new task containing both old and new object classes.</li> </ul>

#### IIIB – Other Appointments

Start	End	Institution	Position
1/07/2007	31/12/2007	San Camillo Forlanini Hospital, Rome (Italy)	<p><b>Medical Physicist Intern</b></p> <ul style="list-style-type: none"> <li>▪ Medical Informatics: elaboration of SPECT images with the SPM software (Statistical Parametric Mapping).</li> <li>▪ Design and maintenance of a database for statistical analysis on patients of the nuclear medicine department.</li> <li>▪ Radiation treatment planning;</li> <li>▪ Quality control for diagnostic radiology, computed tomography, magnetic resonance, nuclear medicine;</li> <li>▪ Radiometabolic treatment planning for hyperthyroidism;</li> </ul>

#### Part IV – Teaching experience

Year	Institution	Lecture/Course
2018	Sapienza Rome University (Italy)	<p><b>Invited Lecturer: short course on Probabilistic methods for the Analysis of Experimental Data</b></p> <p>PhD school of Electrical, Material and Nanotechnology Engineering (EMNE)</p> <p><a href="https://web.uniroma1.it/dottorato_emne/sites/default/files/allegati_notizie/Elenco_seminari_dottorato_EMNE_2018.pdf">https://web.uniroma1.it/dottorato_emne/sites/default/files/allegati_notizie/Elenco_seminari_dottorato_EMNE_2018.pdf</a></p>
2018	University of Udine	<p><b>Invited Lecturer: short course on Life-Long Learning for Intelligent systems at the AI-DLDA 2018 International Summer School On Artificial Intelligence July 2-6 2018</b></p> <p><a href="https://www.aiddaphdschool.org/">https://www.aiddaphdschool.org/</a></p>
2016-2017	Sapienza Rome University (Italy)	<p><b>Probabilistic Methods for the Analysis of Experimental Data</b></p> <p>Master of Science's (Laurea Magistrale) Course for the Curricula of Artificial Intelligence, Robotics and Biomedical Engineering</p> <p><a href="https://sites.google.com/a/dis.uniroma1.it/probabilisticmethods2016_ttommasi/">https://sites.google.com/a/dis.uniroma1.it/probabilisticmethods2016_ttommasi/</a></p>
2015	University of North Carolina (UNC) at Chapel Hill (USA) Computer Science Department	<p><b>Special Topic on Domain Adaptation and Transfer Learning</b></p> <p>Integrative lectures to the UNC Computer Science master course on "Computer Vision"</p>
2011	École Polytechnique Fédérale de Lausanne - EPFL (Switzerland)	<p><b>Teaching Assistant for the EPFL PhD course "Cognitive Vision for Cognitive Systems"</b></p> <ul style="list-style-type: none"> <li>▪ Vision learning for artificial cognitive systems;</li> <li>▪ Classification and regression methods, saliency evaluation, spatial perception and adaptive learning</li> </ul>



## Part V – Student Supervision and Co-Supervision

Period	Institution	Thesis Work
April-October 2017	Sapienza Rome University (Italy)	Master Thesis: "Visual Representations from Deep Metric Learning". Main Supervisor, Student: Alessandra Ciorra
January-July 2017	Sapienza Rome University (Italy)	Master Thesis: "Adaptive Deep Learning through Visual Domain Localization". Main Supervisor, Student: Gabriele Angeletti. Current affiliation Blue Vision Labs (London - UK)
July-December 2014	IIT Kanpur (India)	Bachelor Thesis, Co-Supervisor for the Student Dhruv Kumar Yadav. Current affiliation: member of the technical staff of Oracle, CA, USA
December-June 2011	Royal Institute of Technology - KTH, (Sweden)	Master Thesis, Co-Supervisor for Student Mohsen Kaboli. Current affiliation: post-doctoral researcher at Technische Universität München (TUM), Germany.
February-August 2011	Royal Institute of Technology - KTH, (Sweden)	Bachelor Thesis, Co-Supervisor for the Student Sriram Elango. Current Affiliation: Co-founder of HAAARTLAND ( <a href="http://www.haaartland.com">www.haaartland.com</a> ), Stockholm, Sweden

## Part VI – Formal Responsibility in PhD Thesis as External Expert

Period	Institution	Thesis Work
June 2017	Sapienza Rome University (Italy)	Mr. Tiago Maria Bonanni, Jury Member
April 2017	KU Leuven (Belgium)	Ms. Aparna Nigam Venkatasubramanian, Jury Member
December 2016	Sapienza Rome University (Italy)	Mr. Marco Console, Jury Member

## Part VII – Other Academic Services

Type	Brief Description
Institutional Offices in Teaching and Research Structures	Member of the Doctoral School in Information Engineering, Sapienza Rome University, 2017.
Active Participation to International Congress	<ul style="list-style-type: none"> <li>CVPR 2016 - Chairman of the session 'Grouping and Optimization Methods' <a href="http://cvpr2016.thecvf.com/files/CVPR_2016_Pocket_Guide_Final_resized.pdf">http://cvpr2016.thecvf.com/files/CVPR_2016_Pocket_Guide_Final_resized.pdf</a></li> <li>CVPR 2016 - Student Volunteer Chair: selecting, coordinating and supervising the students during the conference.</li> <li>ECCV 2014 - Organizer and main Lecturer of the Tutorial on Domain Adaptation and Transfer Learning <a href="http://tommasit.wix.com/datl14tutorial">http://tommasit.wix.com/datl14tutorial</a></li> </ul>
Organizer of Workshops and International Challenges	<ul style="list-style-type: none"> <li>Workshop TASK-CV: Transferring and Adapting Source Knowledge in Computer Vision, ECCV 2018, ICCV 2017, ECCV 2016 and ICCV 2015 (<a href="http://adas.cvc.uab.es/task-cv2015/">http://adas.cvc.uab.es/task-cv2015/</a>). I personally searched for sponsors to get best paper awards for the participants: the workshop has been supported by Amazon and Naver Labs Europe in 2017, Amazon and Google in 2016.</li> <li>Multitask and Transfer Learning Workshop at NIPS 2014 and 2013 (<a href="https://sites.google.com/site/multitaskwsnips2014/">https://sites.google.com/site/multitaskwsnips2014/</a>, <a href="https://sites.google.com/site/learningacross/">https://sites.google.com/site/learningacross/</a>)</li> <li>ImageCLEF 2009, Medical Image Annotation Task (<a href="http://imageclef.org/2009/medanno">http://imageclef.org/2009/medanno</a>)</li> </ul>
Editor and Reviewer for Research Publications	<ul style="list-style-type: none"> <li>Associate Editor of IET Computer Vision Journal (<a href="http://digital-library.theiet.org/content/journals/iet-cvi">http://digital-library.theiet.org/content/journals/iet-cvi</a>)</li> <li>Co-Editor of Journal of Machine Learning Research (JMLR) special topic – Multi Task Learning, Domain Adaptation and Transfer Learning (<a href="https://sites.google.com/site/jmlrmtldatl/">https://sites.google.com/site/jmlrmtldatl/</a>)</li> <li>Conference Program Committee Member: ECCV, ICCV, CVPR, BMVC, AAAI, NIPS, AISTATS, ICLR, ICRA, IJCAI, ICML</li> <li>Journal Reviewer: PAMI, CVIU, PRL, JMLR, IEEE-T-RO</li> </ul>
Reviewer for Funding Agencies	<ul style="list-style-type: none"> <li>REPRISE (<a href="https://reprise.cineca.it/en">https://reprise.cineca.it/en</a>) member: reviewer for the research projects funded by MIUR - Ministero Italiano per l'Università e la Ricerca</li> </ul>

## Part VIII - Awards and Honours

Year	Title
2014	Best Paper Award - TASK-CV Workshop, European Conference on Computer Vision.
2013	Candidate to the EPFL Phd Thesis Award: ABB (Asea Brown Boveri)
2012	Finalist for the Google Anita Borg Memorial Scholarship, Europe, Middle East and Africa.
2010	Best Poster Award, INRIA Summer School on Visual Recognition and Machine Learning, Grenoble.
2008	Best paper award of the Idiap Research Institute.
2007-8	Ranked First in two editions of the ImageCLEF challenge. Medical Annotation Task.
2007	Winner of the Stifftelsen BLANCEFLOR Boncompagni Ludovisi Scholarship for studying abroad.
2004-8	Scholarship Winner: Medical Physics Specialization School student grant, assigned to the top 3 students in the selective contest to access the postgraduate school.
2004	Belonging to the top 5% students graduated in Physics at Sapienza Rome University in 2004.

## Part IX - Funding Information [grants as PI-principal investigator]

Year	Title	Program	Grant value
2018	Bi-directional adaptive Generative Adversarial Network combined with attention models for semantic segmentation	<b>NVIDIA GPU Grant Program</b> – project awarded of a NVIDIA Titan Xp ( <a href="https://www.nvidia.it/titan/titan-xp/">https://www.nvidia.it/titan/titan-xp/</a> )	1300 €
2018	Benchmarks for Understanding Grasping - <b>PI Tatiana Tommasi in collaboration with</b> Technische Universitat of Wien (AT), University of Birmingham (UK), Ag. E. Consejo Superior de Investigaciones Cientificas (ES)	<b>CHIST-ERA</b> project on Object Recognition and Manipulation by Robots <b>Accepted at first evaluation phase (March 27, 2018), invited to full proposal submission (May 15, 2018)</b>	500K €

## Part X – Participation to Projects

Period	Brief Description
08/2016 - Today	Collaborator to: RoboExNovo – ERC Starting Grant with PI Prof. B. Caputo Project ID: 637076, supported by H2020
08/2016 - 12/2017	Workpackage Leader for: ALOOF – Autonomous Learning of the Meaning of Objects: Chist-ERA funding scheme supported by the european program EC-FP7 ( <a href="https://project.inria.fr/aloof/">https://project.inria.fr/aloof/</a> )
05/2013-03/2015	Workpackage Leader for: AXES – Access to Audio Visual Archives: IST integrated project supported by the european program EC-FP7 ( <a href="http://www.axes-project.eu/">http://www.axes-project.eu/</a> ) PARIS –Personalised Advertisements Built from Web Sources: SBO prog. founded by the belgian IWT government agency ( <a href="http://www.parisproject.be/index.html">http://www.parisproject.be/index.html</a> )
01/2006-12/2010	Collaborator to: DIRAC – Detection and Identification of Rare Audio-Visual Cues EC-FP6 framework programme supported IST integrated project ( <a href="http://www.diracproject.org">www.diracproject.org</a> )
01/2008-12/2009	Collaborator to: EMMA – Enhanced Medical Multimedia data Access Supported by the Hasler Foundation ( <a href="http://www.haslerstiftung.ch/">www.haslerstiftung.ch/</a> ). <a href="http://www.idiap.ch/scientific-research/projects/enhanced-medical-multimedia-data-access">www.idiap.ch/scientific-research/projects/enhanced-medical-multimedia-data-access</a>
01/06/2011– 30/09/2011	Liaison Program Member: PASCAL 2 – Pattern Analysis, Statistical Modelling and Computational Learning. Network of Excellence funded by the European Union ( <a href="http://www.pascal-network.org">www.pascal-network.org</a> ) My internship period at IST Austria was supported by the Liaison Program on the basis of a short project I wrote. ( <a href="http://pascallin2.ecs.soton.ac.uk/Programmes/LI/">http://pascallin2.ecs.soton.ac.uk/Programmes/LI/</a> )

## Part XI– Top Publications

I list below the 12 most significant works from my publication list. I singled out these publications according to their scientific value, editorial collocation and representativeness of my research vision and direction. To this end, I have chosen my 9 journal publications in the field of computer vision, natural language processing and robotics and the 3 most relevant conference papers appeared in the top venues of computer vision and machine learning.

For the journals I indicate the Impact Factor (IF) at the corresponding publication year as obtained from the website <https://jcr.incites.thomsonreuters.com/>. For the conference proceedings I indicate the official 2017 GII-GRIN-SCIE (GGS) Conference Rating score (A++, A+ = top notch conferences; A, A- = very high quality events; B, B- = events of good quality) as obtained from the website <http://valutazione.unibas.it/gii-grin-scie-rating/conferenceRating.jsf>.

Note also that the International Conference on Computer Vision (ICCV), the International Conference on Computer Vision and Pattern Recognition (CVPR) and the Advances in Neural Information Processing Systems (NIPS) are ranked among the top 4% conferences in the whole computer science field (source: <http://portal.core.edu.au/conf-ranks>).

Title	Authors	Publication Details
From source to target and back: Symmetric Bi-Directional Adaptive GAN	P. Russo, F. M. Carlucci, T. Tommasi, B. Caputo	IEEE International Conference on Computer Vision and Pattern Recognition, <b>CVPR 2018 (A+)</b> <a href="http://cvpr2018.thecvf.com/program/main_conference">http://cvpr2018.thecvf.com/program/main_conference</a> (paper 2781) [num. of cit. 9, source Google Scholar]
Training Deep Networks without Learning Rates Through Coin Betting	F. Orabona, T. Tommasi	Advances in Neural Information Processing Systems, <b>NIPS 2017 (A++)</b> pre-proceedings available online <a href="https://papers.nips.cc/book/advances-in-neural-information-processing-systems-30-2017">https://papers.nips.cc/book/advances-in-neural-information-processing-systems-30-2017</a> [num. of cit. 3, source Google Scholar]
Active Transfer Learning with Zero-Shot Priors: Reusing Past Datasets for Future Tasks	E. Gavves, T. Mensink, T. Tommasi, C. G. M. Snoek, T. Tuytelaars	IEEE International Conference on Computer Vision, <b>ICCV 2015 (A++)</b> DOI: 10.1109/ICCV.2015.313 [num. of cit. 26, source Google Scholar; 11 source Scopus]
Combining Multiple Cues for Visual Madlibs Question Answering	T. Tommasi, A. Mallya, B. Plummer, S. Lazebnik, A. Berg, T. Berg	<b>International Journal of Computer Vision, IJCV 2018 (IF:11.541)</b> DOI: 10.1007/s11263-018-1096-0
What Would They Say? Predicting User's Comments in Pinterest	J. C. Gomez, T. Tommasi, S. Zoghbi and M. F. Moens	<b>IEEE Latin America Transactions, LAT 2016 (IF:0.631)</b> DOI: 10.1109/TLA.2016.7483548 [num. of cit. 3, source Google Scholar; 1 source Scopus]
Joint cross-domain classification and subspace learning for unsupervised adaptation	B. Fernando, T. Tommasi, T. Tuytelaars	Pattern Recognition Letters, <b>PRL 2015 (IF:1.586)</b> DOI: 10.1016/j.patrec.2015.07.009 [num. of cit. 23, source Google Scholar; 18 source Scopus]
Location recognition over large time lags	B. Fernando, T. Tommasi, T. Tuytelaars	Computer Vision and Image Understanding, <b>CVIU 2015 (IF:2.134)</b> DOI:10.1016/j.cviu.2015.05.016 [num. of cit. 6, source Google Scholar; 3 source Scopus]
Learning Categories From Few Examples With Multi Model Knowledge Transfer	T. Tommasi, F. Orabona, B. Caputo	IEEE Transactions on Pattern Analysis and Machine Intelligence, <b>T-PAMI 2014 (IF:5.781)</b> DOI: 10.1109/TPAMI.2013.197 [num. of cit. 67, source Google Scholar; 38 source Scopus]
Improving Control of Dexterous Hand Prostheses Using Adaptive Learning	T. Tommasi, F. Orabona, C. Castellini, B. Caputo	IEEE Transactions on Robotics, <b>T-RO 2013 (IF:2.649)</b> DOI: 10.1109/TRO.2012.2226386 [num. of cit. 49, source Google Scholar; 31 source Scopus]
Using Object Affordances to Improve Object Recognition	C. Claudio, T. Tommasi, N. Noceti, F. Odone, B. Caputo	IEEE Transactions on Autonomous Mental Development, <b>T-AMD 2011 (IF:2.310)</b> DOI: 10.1109/TAMD.2011.2106782 [num. of cit. 51, source Google Scholar; 34 source Scopus]
Learning Methods for Melanoma Recognition	E. La Torre, B. Caputo, T. Tommasi	International Journal of Imaging Systems and Technology, <b>IJIST 2010 (IF: 0.684)</b> DOI: 10.1002/ima.20261 [num. of cit. 17, source Google Scholar; 9 source Scopus]
Discriminative Cue Integration for Medical Image Annotation	T. Tommasi, F. Orabona, B. Caputo	Pattern Recognition Letters, <b>PRL 2008 (IF:1.559)</b> DOI: 10.1016/j.patrec.2008.03.009 [num. of cit. 93, source Google Scholar; 56 source Scopus]

**Part XII– Full list of Publications**

Title	Authors / Editors	Publication Details
<b>EDITED VOLUMES</b>		
JMLR Special Topic on Multi Task Learning, Domain Adaptation and Transfer Learning	Guest Editors: U. Dogan, M. Kloft, F. Orabona, <b>T. Tommasi</b>	<b>The paper contributions appear in JMLR 17(171), 2016</b> ( <a href="http://jmlr.org/papers/v17/">http://jmlr.org/papers/v17/</a> ) ( <a href="https://sites.google.com/site/jmlrmtldat/">https://sites.google.com/site/jmlrmtldat/</a> )
<b>BOOK CHAPTERS</b>		
A deeper Look at Dataset Bias	<b>T. Tommasi</b> , N. Patricia, B. Caputo, T. Tuytelaars	<b>Domain Adaptation in Computer Vision Applications, 37-55, September 2017</b> DOI: 10.1007/978-3-319-58347-1_2
Learning to learn new models of human activities in indoor settings	F. Nater, <b>T. Tommasi</b> , L. Van Gool, B. Caputo	<b>Multimodal Interactive Systems Management, 156-172, September 2013.</b> DOI: 10.1201/b15535-14
The Medical Image Classification Task	<b>T. Tommasi</b> , T. Deselaers	<b>ImageCLEF, 2010</b> DOI: 10.1007/978-3-642-15181-1_12
Idiap on Medical Image Classification	<b>T. Tommasi</b> , F. Orabona	<b>ImageCLEF, 2010</b> DOI: 10.1007/978-3-642-15181-1_24
<b>JOURNAL ARTICLES</b>		
Combining Multiple Cues for Visual Madlibs Question Answering	<b>T. Tommasi</b> , A. Mallya, B. Plummer, S. Lazebnik, A. Berg, T. Berg	<b>International Journal of Computer Vision, IJCV 2018 (IF:11.541)</b> DOI: 10.1007/s11263-018-1096-0
What Would They Say? Predicting User's Comments in Pinterest	J. C. Gomez, <b>T. Tommasi</b> , S. Zoghbi, M. F. Moens	<b>IEEE Latin America Transactions, LAT 2016 (IF:0.631)</b> DOI: 10.1109/TLA.2016.7483548
Joint cross-domain classification and subspace learning for unsupervised adaptation	B. Fernando, <b>T. Tommasi</b> , T. Tuytelaars	<b>Pattern Recognition Letters, PRL 2015 (IF:1.586)</b> DOI: 10.1016/j.patrec.2015.07.009
Location recognition over large time lags	B. Fernando, <b>T. Tommasi</b> , T. Tuytelaars	<b>Computer Vision and Image Understanding, CVIU 2015 (IF:2.134)</b> DOI:10.1016/j.cviu.2015.05.016
Learning Categories From Few Examples With Multi Model Knowledge Transfer	<b>T. Tommasi</b> , F. Orabona, B. Caputo	<b>IEEE Transactions on Pattern Analysis and Machine Intelligence, T-PAMI 2014 (IF:5.781)</b> DOI: 10.1109/TPAMI.2013.197
Improving Control of Dexterous Hand Prostheses Using Adaptive Learning	<b>T. Tommasi</b> , F. Orabona, C. Castellini, B. Caputo	<b>IEEE Transactions on Robotics, T-RO 2013 (IF:2.649)</b> DOI: 10.1109/TRO.2012.2226386
Using Object Affordances to Improve Object Recognition	C. Claudio, <b>T. Tommasi</b> , N. Noceti, F. Odone, B. Caputo	<b>IEEE Transactions on Autonomous Mental Development, T-AMD 2011 (IF:2.310)</b> DOI: 10.1109/TAMD.2011.2106782
Learning Methods for Melanoma Recognition	E. La Torre, B. Caputo, <b>T. Tommasi</b>	<b>International Journal of Imaging Systems and Technology, IJIST 2010 (IF:0.684)</b> DOI: 10.1002/ima.20261
Discriminative Cue Integration for Medical Image Annotation	<b>T. Tommasi</b> , F. Orabona, B. Caputo	<b>Pattern Recognition Letters, PRL 2008 (IF:1.559)</b> DOI: 10.1016/j.patrec.2008.03.009 [Winner of the Idiap best paper award]
<b>PEER-REVIEWED CONFERENCE PAPERS</b>		
From source to target and back: Symmetric Bi-Directional	P. Russo, F. M. Carlucci,	IEEE International Conference on Computer Vision and Pattern Recognition, <b>CVPR 2018 (A+)</b>

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Adaptive GAN	T. Tommasi, B. Caputo	<a href="http://cvpr2018.thecvf.com/program/main_conference">http://cvpr2018.thecvf.com/program/main_conference</a>
Adaptive Deep Learning Through Visual Domain Localization	G. Angeletti, B. Caputo, T. Tommasi	IEEE International Conference on Robotics and Automation, <b>ICRA 2018 (A)</b> <a href="https://ras.papercept.net/conferences/conferences/ICRA18/program/ICRA18_ContentListWeb_4.html#thp@j_04">https://ras.papercept.net/conferences/conferences/ICRA18/program/ICRA18_ContentListWeb_4.html#thp@j_04</a>
Training Deep Networks without Learning Rates Through Coin Betting	F. Orabona, T. Tommasi	Advances in Neural Information Processing Systems, <b>NIPS 2017 (A++)</b> <a href="https://papers.nips.cc/book/advances-in-neural-information-processing-systems-30-2017">https://papers.nips.cc/book/advances-in-neural-information-processing-systems-30-2017</a>
Learning Deep Visual Object Models From Noisy Web Data: How to Make it Work	N. Massouh, F. Babiloni, T. Tommasi, J. Young, N. Hawes, B. Caputo	IEEE/RSJ International Conference on Intelligent Robots and Systems, <b>IROS 2017 (A)</b> DOI: 10.1109/IROS.2017.8206444
Solving Visual Madlibs with Multiple Cues	T. Tommasi, A. Mallya, B. Plummer, S. Lazebnik, A. C. Berg, T. L. Berg	British Machine Vision Conference, <b>BMVC 2016 (A)</b> DOI: 10.5244/C.30.77
Active Transfer Learning with Zero-Shot Priors: Reusing Past Datasets for Future Tasks	E. Gavves, T. Mensink, T. Tommasi, C. G. M. Snoe, T. Tuytelaars	IEEE International Conference on Computer Vision, <b>ICCV 2015 (A++)</b> DOI: 10.1109/ICCV.2015.313
A Deeper Look at Dataset Bias	T. Tommasi, N. Patricia, B. Caputo, T. Tuytelaars	German Conference on Pattern Recognition, <b>GCPR 2015</b> DOI: 10.1007/978-3-319-24947-6_42
Multi-Source Adaptive Learning for Fast Control of Prosthetics Hand	N. Patricia, T. Tommasi, B. Caputo	International Conference of Pattern Recognition, <b>ICPR 2014 (A-)</b> DOI: 10.1109/ICPR.2014.477
Frustratingly Easy NBNN Domain Adaptation	T. Tommasi, B. Caputo	IEEE International Conference on Computer Vision, <b>ICCV 2013 (A++)</b> DOI: 10.1109/ICCV.2013.116
Beyond Dataset Bias: Multi-task Unaligned Shared Knowledge Transfer	T. Tommasi, N. Quadrianto, B. Caputo, C. H. Lampert	Asian Conference on Computer Vision, <b>ACCV 2012 (B)</b> DOI: 10.1007/978-3-642-37331-2_1
Leveraging over Prior Knowledge for Online Learning of Visual Categories	T. Tommasi, F. Orabona, M. Kaboli, B. Caputo	British Machine Vision Conference, <b>BMVC 2012 (A)</b> DOI: 10.5244/C.26.87
Multiclass Transfer Learning from Unconstrained Priors	L. Jia, T. Tommasi, B. Caputo	IEEE International Conference on Computer Vision, <b>ICCV 2011 (A++)</b> DOI: 10.1109/ICCV.2011.6126454
Object Recognition using Visuo-Affordance Maps	A. Gijsberts, T. Tommasi, G. Metta, B. Caputo	IEEE/RSJ International Conference on Intelligent Robots and Systems, <b>IROS 2010 (A)</b> DOI: 10.1109/IROS.2010.5649238
Safety in Numbers: Learning Categories from Few Examples with Multi Model Knowledge Transfer	T. Tommasi, F. Orabona, B. Caputo	IEEE Conference on Computer Vision and Pattern Recognition, <b>CVPR 2010 (A+)</b> DOI: 10.1109/CVPR.2010.5540064 <b>[Winner of the best poster award, INRIA Summer School]</b>
The more you know, the less you learn: from knowledge transfer to one-shot learning of object categories	T. Tommasi, B. Caputo	British Machine Vision Conference, <b>BMVC 2009 (A)</b> DOI: 10.5244/C.23.80
Kernel Methods for Melanoma Recognition	E. La Torre, T. Tommasi, B. Caputo, G.E. Gigante	International Congress of the European Federation for Medical Informatics, <b>MIE 2006</b> DOI: 10.3233/978-1-58603-647-8-983



WORKSHOPS and MINOR CONFERENCES		
Learning the Roots of Visual Domain Shift	<b>T. Tommasi</b> , M. Lanzi, P. Russo, B. Caputo	<b>TASK-CV Workshop at ECCV 2016</b> (LNCS, volume 9915, pp 475-482) DOI: 10.1007/978-3-319-49409-8_39
A Testbed for Cross-Dataset Analysis"	<b>T. Tommasi</b> , T. Tuytelaars	<b>TASK-CV Workshop at ECCV 2014</b> (LNCS, volume 8927, pp 18-31) DOI: 10.1007/978-3-319-16199-0_2 [Winner of the best paper award at TASK-CV workshop]
Beyond Metadata: Searching your Archive based on its Audio-Visual Content	<b>T. Tommasi</b> , R. Aly, K. McGuinness, K. Chatfield, R. Arandjelovic, O. Parkhi, R. Ordelman, A. Zisserman, T. Tuytelaars	<b>International Broadcasting Convention, IBC 2014</b> DOI: 10.1049/ib.2014.0003
Does Evolution cause a Domain Shift?	K. Rematas, B. Fernando, <b>T. Tommasi</b> , T. Tuytelaars	<b>VisDA Workshop at ICCV 2013</b> <a href="https://sites.google.com/site/visda2013proceedings/">https://sites.google.com/site/visda2013proceedings/</a>
Transferring Activities: Updating Human Behavior Analysis	F. Nater, <b>T. Tommasi</b> , H. Grabner, L. Van Gool, B. Caputo	<b>Computer Vision Workshop at ICCV 2011</b> DOI: 10.1109/ICCVW.2011.6130459
Towards a quantitative measure of rareness	<b>T. Tommasi</b> , B. Caputo	<b>DIRAC Workshop at ECML 2010</b> (Springer SCI, vol. 384, pp 129-136) DOI: 10.1007/978-3-642-24034-8_11
Overview of the CLEF 2009 Medical Image Annotation Track	<b>T. Tommasi</b> , B. Caputo, P. Welter, M. O. Güld, T. M. Deserno	<b>CLEF 2009: Multilingual Information Access Evaluation II. Multimedia Experiments</b> (LNCS, volume 6242, pp 85-93) DOI: 10.1007/978-3-642-15751-6_9
An SVM Confidence-Based Approach to Medical Image Annotation	<b>T. Tommasi</b> , F. Orabona, B. Caputo	<b>CLEF 2008: Evaluating Systems for Multilingual and Multimodal Information Access</b> (LNCS, vol. 5706, pp 696-703) DOI: 10.1007/978-3-642-04447-2_88
Cue Integration for Medical Image Annotation	<b>T. Tommasi</b> , F. Orabona, B. Caputo	<b>CLEF 2007: Advances in Multilingual and Multimodal Information Retrieval</b> (LNCS, vol. 5152, pp 577-584) DOI: 10.1007/978-3-540-85760-0_72
Melanoma Recognition Using Representative and Discriminative Kernel Classifiers	<b>T. Tommasi</b> , E. La Torre, B. Caputo	<b>International Workshop on Computer Vision Approaches to Medical Image Analysis, ECCV-CVAMIA 2006</b> (LNCS, vol. 4241, pp 1-12) DOI: 10.1007/11889762_1

Il presente curriculum è stato compilato ai sensi e per gli effetti dell'art. 76 D.P.R. 445/2000, nella consapevolezza della responsabilità e delle conseguenze civili e penali previste in caso di dichiarazioni mendaci e/o formazione od uso di atti falsi. Per i titoli specificati, così come per le pubblicazioni presentate, il presente curriculum vale come dichiarazione sostitutiva di certificazione e dell'atto di notorietà ai sensi degli artt. 46 e 47 D.P.R. 445/2000.

Ai sensi della legge 675/96 (tutela delle persone e di altri soggetti rispetto al trattamento dei dati personali) e dell'art. 13 del D.lgs 30 giugno 2003 n°196, AUTORIZZO al trattamento dei dati personali contenuti nel presente curriculum per permettere un'adeguata valutazione della mia candidatura.

Rome, 20/8/2018

Tatiana Tommasi

*Tatiana Tommasi*

*[Signature]*

**Ing. Daniele Toti, Ph.D.**  
**Senior Research Scientist, Computer Engineer, Java Specialist**

University of Cambridge CPE Holder  
Sun Certified Java Programmer  
Sun Certified Web Component Developer  
Oracle Java Business Component Developer Certified Professional  
Oracle Java Web Services Developer Certified Professional  
Oracle Database SQL Certified Expert  
Oracle Database Administrator Certified Associate  
Goju-Ryu Karate Shodan and Certified ENDAS Trainer



**UNIVERSITY of CAMBRIDGE**  
Certificate of Proficiency in English (CPE)



**ORACLE**  
Certified Professional  
Java EE 5 Business  
Component Developer

**ORACLE**  
Certified Professional  
Java EE 5 Web Services  
Developer

**ORACLE**  
Certified Expert  
Oracle Database SQL

**ORACLE**  
Certified Associate  
Oracle Database 11g  
Administrator

**Curriculum Vitae et Studiorum**

**EDUCATION**

**Nov 2008 – Apr 2012**

**Doctor of Philosophy (Ph.D.) in Computer Science and Engineering**  
**Department of Computer Science and Automation (Database Research Group)**  
**and Department of Sciences (Theoretical Biology and Bioinformatics Laboratory),**  
**Roma Tre University, Rome, Italy**  
Graduation date: **April, 19<sup>th</sup> 2012**

Primary Advisor: **Prof. Paolo Atzeni**

Secondary Advisor: **Prof. Fabio Polticelli**

Ph.D. Thesis: **Model and Domain Independence: An Experience in Model Management and Information Extraction**

Research subjects:

- **Model Management**, within the context of model-independent schema and data translations
- **Information Extraction and Knowledge Discovery** from unstructured sources, with relevant applicability to **Bioinformatics, collaborative frameworks and e-learning solutions**

Relevant projects:

- **MIDST**: a framework for model-independent schema and data transformations
- **PRAISED**: a processor for abbreviation identification, resolution and domain entity recognition from full-text papers in scientific literature

Additional activities:

- **Student tutoring, supervision and coordination** for Master's Theses and university classes
- **Seminars and practical lessons delivery** for Database courses

**Jan 2012**

Participation in the **TRIPLE Winter School 2012**: Word Classes, Models, Typology, Computation, at Roma Tre University, Rome

**Oct 2011**

**Data Mining Techniques for Classification course** attended at CASPUR, Rome

**Jan 2011**

Participation in the **TRIPLE Winter School 2011**: Lemma, Organization of Lexical Information and Computational Linguistics, at Roma Tre University, Rome

**Sep 2010**

**Project Management course** attended at CASPUR, Rome

**Jan 2009**

**Certificate of Proficiency in English (CPE)**  
**University of Cambridge, United Kingdom**

**Nov 2008**

**Registration to the Board of Professional Engineers**  
**Rome Province, Section A – Information Section, with serial number 29962**

**Mar 2007 – Nov 2008**

**Advanced English language course** attended at A&A International Language School in preparation for the Certificate of Proficiency in English examination

**Oct 2005 – Mar 2008**

**Master's Degree in Computer Engineering**  
**Roma Tre University, Rome, Italy**  
Graduation date: **March, 26<sup>th</sup> 2008**  
Graduation mark: **110/110 summa cum laude**

Topic researched: **Study of polymorphism applied to a data dictionary**, whose results have been summarized in a preliminary article submitted to and approved by **EJC – European Japanese Conference 2008**, which was held in June, 2-6 2008 in **Tsukuba, Japan**.

Related keywords: *Datalog, PolyDatalog, polymorphism, inheritance, interpreter, rule processor, model, schema, model-independence, model management, ModelGen, MIDST, Java*

Primary Supervisor: **Prof. Paolo Atzeni**

**Oct 2001 – Oct 2005**

**Bachelor's Degree in Computer Engineering**

**Roma Tre University, Rome, Italy**

Course specification: **Computer Systems**

Graduation date: **October, 5<sup>th</sup> 2005**

Graduation mark: **110/110 summa cum laude**

Topic researched: **Development of a GUI for a database model and schema translator**

Related keywords: *translation, meta-model, super-model, model-independence, model, schema, graphic user interface, Java, Swing*

Primary Supervisor: **Prof. Paolo Atzeni**

**Sep 1996 – Jul 2001**

Senior Scientific High School "Santa Dorotea", Rome, Italy

**Experimental course in Computer Science**

Graduation mark: **100/100**; Average mark: **9,6/10**

**Sep 1993 – Jul 1996**

Junior High School "Francesco Petrarca", Rome, Italy

**Bilingual course featuring English and French**

Graduation grade: **Excellent**; Average grade: **A/A**

**PROFESSIONAL EXPERIENCE**

**Current position(s)**

**Jul 2017 – present**

**Contract Professor**

Employer: **Niccolò Cusano University**

Type: **Academic appointment**

Courses:

- Text Mining & Natural Language Processing, post-graduate course, 2017-2018
- Computer Networks – Security mechanisms, post-graduate course, 2017-2018
- Operational management of computers and networks, post-graduate course, 2017-2018

Activities:

- Coordinator of the post-graduate program: **"Data Science: Information & Knowledge Management for Data Scientists"**
- Lecturer
- Student tutor
- Committee member for Thesis defense

**May 2017 – present**

**Senior Natural Language Analyzer**

Employer: **Innovation Engineering**

Type: **full-time permanent contract**

Description: Researching and developing advanced natural language processing solutions and tools for Information Extraction and Knowledge Discovery within the context of several EU-funded and national projects, and integrating them into a number of commercial products

Research subjects:

- **Information Extraction and Knowledge Discovery**

Relevant projects:

- **DANTE**: Detecting and Analysing TErrorist-related online contents and financing activities, H2020-FCT-2015
- **LASIE**: LArge Scale Information Exploitation of Forensic Data, FP7-SEC-2013-1
- **SURVANT**: SURveillance Video Archives iNvestigation assistant, H2020-FTIPilot-2015-1
- **WheesBee**: Information Retrieval and Extraction for supporting organizations in technological innovation processes, PON 2017

Additional activities:

- **Writing EU Horizon 2020 project proposals**

**Jan 2013 – present**

**Senior Research Scientist**

Employer: **Theoretical Biology and Bioinformatics Laboratory, Department of Sciences at Roma Tre University**

Type: **Academic appointment (pro bono)**

Description: Collaboration to the whole range of research activities of the laboratory directed by **Prof. Fabio Polticelli** and of teaching activities in Computer Science and Engineering

Research subjects:

- **Information Extraction and Knowledge Discovery** applied to **Bioinformatics**



- **Protein function recognition** via algorithmic analysis of structural similarities
- Relevant projects:
- **CONCEPTUM**: a cross-domain system for semantic conceptualization, classification, ontology building and intelligent search of unstructured textual sources
  - **LIBRA** and **LIBRA-WA**: programs for protein function prediction according to three-dimensional structural similarity of catalytic sites, as an extension and improvement of the formerly developed ASSIST3D
  - **DockingApp**: a user-friendly, graphical-intensive application for molecular docking and virtual screening
- Additional activities:
- **Writing EU Horizon 2020 project proposals**
  - **Delivery of courses** for Ph.D. students
  - **Delivery of seminars and practical lessons** for Master's classes
  - **Student tutoring, supervision and coordination** for Master's Theses and university classes
  - **Master's Thesis, Bachelor's Thesis and exam committee member** at Roma Tre University

#### **Past positions**

**Jul 2016 – Mar 2017**

##### **Senior Research Scientist**

Employer: **Department of Engineering at Roma Tre University**

Type: **Academic appointment**

Description: Scientific collaboration to the research, design and development of a collaborative software platform for managing and analyzing output data of nanoindentation experiments, under the supervision of **Prof. Edoardo Bemporad**

Research subjects:

- Methodologies and technologies for assessing similarity among nanoindentation curves based on a variety of quantitative and qualitative criteria, including computer vision, polynomial fitting, and other numerical analyses
- Methodologies and solutions for data management, visualization, integration, optimization and scalability when dealing with large amounts of information and data to be processed

Relevant projects:

- **Ind-o-matic**

Additional activities:

- Coordination of requirements analysis, software design and development activities in cooperation with third-party ICT companies

**Oct 2015 – Jan 2017**

##### **Senior Research Consultant, Bid Manager**

Employer: **RAN Innovation S.r.l., Rome**

Type: **Free-lance business contract**

Description: Research consulting for the design, development and deployment of advanced knowledge discovery platforms and for applying to national and international grants

Relevant projects:

- **EMBRACE (Energy, Materials and Bio-based industry virtual Research And Collaboration Environment)**
- **CONCEPTUM (Conceptualizer, Category Extractor, Parser and Textual Unified Miner)** – commercial version

Main activities and responsibilities:

- Researching and developing innovative semantics-based information extraction and knowledge discovery solutions verticalized to specific customers
- Preparing and revising grant applications for national and international frameworks, including Horizon 2020

Skills and practices:

- *Information extraction and knowledge discovery methodologies and technologies*
- *Grant application writing and management*

Technologies and tools:

- IDE: *Eclipse*
- DB/DBMS: *MySQL, HSQLDB*
- Application server: *Apache Tomcat*
- Frameworks: *Spring, Struts*
- Other: *Microsoft Office, Adobe Acrobat, Corel Draw X4 Graphics Suite, Adobe Photoshop CS5*

**Apr 2013 – Jun 2016**

##### **Senior Research Scientist/Senior Research Consultant**

Employer(s): **Pole for Excellence in Knowledge (Department of Computer and Electrical Engineering and Applied Mathematics at the University of Salerno, CRMPA, MOMA S.p.A.)**

Type: **Academic appointment/collaboration contract**

Description: Researching models, methodologies and technologies for knowledge representation, extraction and discovery, and their industrial and commercial application to a wide range of fields, including e-Learning, HRM and semantic frameworks

Research subjects:

- **Information Extraction and Knowledge Discovery**



- **Natural Language Processing**
- **Ontology Engineering and Data Modeling**
- **Ontology Matching/Integration**

**Relevant projects:**

- **eJRM** - electronic Justice Relationship Management, IT PON framework, PON01\_01286
- **SIRET** - Integrated System for Recruiting and Training, IT PON framework, PON01\_03024
- **MODERN** - Architectural Models for the Definition, Execution and Re-engineering of User-Centric processes in the Organizations, IT PON framework, PON01\_01949

**Main activities and responsibilities:**

- Researching and developing semantic categorization and conceptualization solutions and tools, including developing fact finding solutions and enhancing linguistic parsing for the English and Italian languages
- Researching and developing solutions for natural language query answering over semantic data
- Researching and developing ontology matching and integration solutions and tools applied to the juridical domain
- Defining and refining conceptual models and ontologies
- Collaboration and support to the writing of several EU Horizon 2020 project proposals

**Skills and practices:**

- *Project management*
- *RDF/OWL modeling*
- *Software architecture design*
- *Java programming*
- *SPARQL querying*
- *SQL and No-SQL database design and querying*

**Technologies and tools:**

- IDE: *Eclipse, Microsoft Visual Studio 2013*
- DB/DBMS: *MySQL, Oracle 11g, MongoDB, HSQLDB*
- Application server: *Apache Tomcat*
- Other: *Stanford NLP, TreeTagger, Apache Lucene, Apache OpenNLP, MaltParser, OpenRDF/Sesame, Jena, Corese, WikipediaMiner*

**Jan 2012 – Jun 2013**

**IT Consultant**

Employer: **KMA Studio, Rome**

Type: **Free-lance business contract**

Description: Technological consulting for the research, design, development and management of advanced software applications for a variety of customers

**Relevant projects:**

- **LungoITevereRoma** Augmented Reality mobile app

**Main activities and responsibilities:**

- Designing, developing, refactoring and testing Java-based software applications, CMSS, web applications and mobile applications according to the customers' needs
- Providing customers with innovative technological approaches and solutions as well as programming expertise

**Skills and practices:**

- *Object-oriented analysis and design for software architectures and components by the application of well-known design and architectural patterns*
- *Android programming*
- *Java SE programming*
- *SQL programming*

**Technologies and tools:**

- IDE: *Eclipse, Android SDK*
- DB/DBMS: *MySQL, HSQLDB*
- Other: *Corel Draw X4 Graphics Suite, Adobe Photoshop CS3*

**Dec 2011 – Jan 2013**

**Research Scientist**

Employer: **Department of Computer Science and Automation at Roma Tre University, Rome**

Type: **Academic appointment**

Description: Member of the Database research group, in cooperation with the Theoretical Biology and Bioinformatics Laboratory of Roma Tre University, respectively under the supervision of Prof. Paolo Atzeni and Prof. Fabio Polticelli.

**Research subjects:**

- **Information Extraction and Knowledge Discovery** with special regard to **Bioinformatics**

**Relevant projects:**

- **PRAISED**: a processor for abbreviation identification, resolution and domain entity recognition from full-text papers in scientific literature
- **ASSIST3D**: a program for protein function prediction according to three-dimensional structural similarity of catalytic sites

**Additional activities:**

- **Honorary Fellow in Information Systems**



- **Student tutoring, supervision and coordination** for Master's Theses and university classes
- **Master's Thesis, Bachelor's Thesis and exam committee member** at Roma Tre University

Sep 2011 – Dec 2012

### Research Scientist, Software Architect

Employer: **CRMPA - Research Center for Pure and Applied Mathematics**, Rome

Type: **Part-time Academic/collaboration contract**

Description: Researching and developing semantic-based solutions for intelligent e-learning platforms and collaborative frameworks.

Research subjects:

- **Knowledge Building and Extraction**
- **Natural Language Processing**
- **Ontology building/learning, ontology engineering**

Relevant projects:

- **ARISTOTELE**, co-funded by the European Committee within the Seventh Framework Programme (FP7)

#### Main activities and responsibilities:

- Defining and refining conceptual models and ontologies
- Researching semantic solutions for automatic knowledge discovery from user-generated contents
- Preparing and editing project proposals for EU calls (FP7) as master editor
- Managing the full life-cycle (analysis, design, development etc.) of a Linked Data Layer, in order to provide a data-source independent abstraction over the underlying RDF/OWL models of the ARISTOTELE system, stored within a Sesame Triplestore and accessed via SPARQL queries
- Designing and backbone developing SharePoint-based software architectures and interacting components and tools
- Researching and developing effective and efficient algorithms and storage solutions for Fuzzy Formal Concept Analysis (FFCA) via No-SQL databases
- Researching and developing solutions for query answering over semantic data, including challenging natural language processing tasks (POS tagging and lemmatization for the Italian language, named entity recognition, word similarity computation), as well as matching natural language queries with ontological structures and automatic building of SPARQL queries
- Researching and developing algorithms and solutions for Social Network Analysis and Relevance Analysis via semantic modeling and enhanced SPARQL queries

#### Skills and practices:

- *Object-oriented analysis and design for software architectures and components by the application of well-known design and architectural patterns*
- *Project management*
- *Software architecture design*
- *C# programming*
- *Java programming*
- *RDF/OWL modeling*
- *SPARQL querying*
- *SQL and No-SQL database design and querying*

#### Technologies and tools:

- IDE: *Microsoft Visual Studio 2010, Eclipse*
- DB/DBMS: *Microsoft SQL Server 2008, MongoDB, HSQLDB*
- Other: *Stanford NLP, TreeTagger, Apache Lucene, OpenRDF/Sesame, Jena, Corese, WikipediaMiner, Microsoft SharePoint 2010*

Jun 2011 – Sep 2011

### IT Consultant

Employer: **Beyond S.r.l.**, Rome

Type: **Free-lance business contract**

Description: Technological consulting for the research, design, development and management of advanced software applications for a variety of customers

Relevant projects:

- MBS (Micro Biological Survey) software application

#### Main activities and responsibilities:

- Designing, developing, refactoring and testing Java-based software applications, CMSs, web applications and solutions according to the customers' needs
- Providing customers with innovative technological approaches and solutions as well as programming expertise

#### Skills and practices:

- *Object-oriented analysis and design for software architectures and components by the application of well-known design and architectural patterns*
- *Java SE/EE programming*
- *SQL programming*

#### Technologies and tools:

- IDE: *Eclipse*
- DB/DBMS: *MySQL, HSQLDB*
- Application server: *Apache Tomcat*
- Frameworks: *Spring, Struts*
- Other: *Corel Draw X4 Graphics Suite, Adobe Photoshop CS3*

Jul 2008 – Feb 2010

### IT Consultant

Employer: **Altran Italia S.p.A.**, Rome

Type: **Full-time permanent contract**

Customer: **RAI (Italian National Broadcasting Company) – RaiNet division**

Description: Technological consulting for the management and development of advanced websites, Content Management Systems and distributed applications

#### Main activities and responsibilities:

- Designing, developing and deploying web applications and their related CMSs, either addressed to a variety of internal RaiNet customers or fulfilling specific needs (e.g. "RaiTrade", "RaiCasting", "Statistiche", "LavoraConNoi"), by relying on well-known patterns like *Model-View-Controller* and/or frameworks like *Spring*
- Managing and improving multiple RaiNet projects, including main TV Program Schedule application, User-Generated Content Systems, and "Televideo" new website and CMS, which was shown at SMAU 2008 in Milan, Italy

#### Skills and practices:

- *Java SE/EE programming*
- *SQL programming*
- *Application of well-known design and architectural patterns*
- *Web designing (HTML/CSS)*

#### Technologies and tools:

- IDE: *Eclipse*
- DB/DBMS: *Oracle*
- Application server(s): *Apache Tomcat, Sun Java System/Glassfish, Oracle/BEA Weblogic*
- Frameworks: *Spring, Struts*
- Other: *Corel Draw X4 Graphics Suite, Adobe Photoshop CS3*

#### Additional strengths:

- Technical leadership for several RaiNet projects (incl. "RaiTrade", "RaiCasting", TV Program Schedule etc.)
- Working under tight, "in-time-for-yesterday" customer deadlines, and meeting them
- Cooperating with a heterogeneous team made up of differently-skilled people
- Assisting colleagues IT by providing them with technical help and insight when necessary

May 2008 – Jul 2008

### Research Assistant

Employer: **Department of Computer Science and Automation** at Roma Tre University, Rome

Type: **Full-time collaboration contract**

Description: Collaboration within the Database Research Group under the supervision of Prof. Paolo Atzeni

#### Main activities and responsibilities:

- Further insight on the topic researched during Master's Thesis (PolyDatalog)
- **Participation in EJC 2008 at Tsukuba International Congress Center, in Tsukuba, Japan, June 2008**
- Completion of a full-fledged article about PolyDatalog to be subsequently submitted for publication in scientific literature
- **Supervision and coordination** of several groups of students within the ModelGen research project:
  - *Assigning and supervising multiple short-scale projects*
  - *Checking and reviewing intermediate development steps*
  - *Assessing the results achieved and the overall correctness and efficiency of the students' work*
- Refactoring for selected components of the whole MIDST system

### Academic learning experiences

Oct 2007 – Mar 2008

#### Master's Thesis in Database Systems

Study of polymorphism applied on a data dictionary, within the context of a research project on model-independent schema translations: introducing polymorphism and inheritance features within a non-polymorphic language (Datalog), and developing a Java interpreter for such an extended language

May 2005 – Sep 2005

#### Team Project in Database Systems (Bachelor's Thesis)

Coordination and cooperation within a team of two in the development of a Graphic User Interface for "ModelGen", a database model and schema handler and translator, whose demo was shown in **ICDE 2005, Tokyo, Japan**.

#### Skills involved:

- *Object-oriented analysis and design and Iterative-Incremental Development*
- **Java programming:** *JavaBeans (model), Java Swing (user interface), Java2D (graphical reports of schemas)*
- **Event programming and handling**
- *SQL programming*
- *HTML, XML, X-HTML knowledge*

Dec 2006 – Feb 2007

#### Team Project in Information Systems

Simulation of a **Business Process Re-engineering** and **Feasibility Study** on a critical real business process.

Oct 2006 - Nov 2006

#### Team Project in IT Communication

Proficient usage of communication techniques related to marketing and advertising within an artificial technological context.

##### Skills involved:

- Knowledge and understanding of a specific technological context
- Knowledge of appropriate communication techniques and audience-oriented best practices for public speaking
- Proficiency and fluency in speaking English in front of an audience

Oct 2006 - Nov 2006

#### Project in Computer Networks

Configuration and simulation of a Big-Internet-comparable network via a network simulation tool (*NetKit*), and subsequent implementation and analysis of a network hijacking by BGP announcements.

##### Skills involved:

- Inter and intra-domain routing protocols knowledge and usage (**BGP, RIP, etc.**)
- Netkit and Zebra proficient usage

May 2005 - Sep 2005

#### Team Project in Database Systems (Bachelor's Thesis)

Coordination and cooperation within a team of two in the development of a Graphic User Interface for "ModelGen", a database model and schema handler and translator, whose demo was shown in **ICDE 2005, Tokyo, Japan**.

##### Skills involved:

- Object-oriented analysis and design and Iterative-Incremental Development
- **Java programming:** JavaBeans (model), Java Swing (user interface), Java2D (graphical reports of schemas)
- **Event programming and handling**
- SQL programming
- HTML, XML, X-HTML knowledge

## KNOWN LANGUAGES

- **Italian** (native)
- **English** (mastery, C2)

Certification: **Certificate of Proficiency in English (CPE)** issued by the University of Cambridge (corresponding to Level C2 "Mastery" within the Common European Framework of Reference (CEFR) and to Level 3 in the UK National Qualifications Framework (NQF), certifying a knowledge of the English language comparable to that of an educated native speaker)

- **French** (intermediate, B1)
- **Japanese** (limited, A1)

## PUBLICATIONS<sup>1</sup>

### Refereed Journal/Magazine Papers

1. Nicola Capuano, Daniele Toti (CA). **Experimentation of a smart learning system for law based on knowledge discovery and cognitive computing**. In *Computers in Human Behavior* (in press), DOI: 10.1016/j.chb.2018.03.034
2. Daniele Toti, Viet Hung Le, Valentina Tortosa, Valentina Brandi, Fabio Polticelli. **LIBRA-WA: a web application for ligand binding site detection and protein function recognition**. In *Bioinformatics*, Vol. 34, No. 5, 2018, DOI: 10.1093/bioinformatics/btx215
3. Paolo Ascenzi, Loris Leboffe, Daniele Toti, Fabio Polticelli, Viviana Trezza. **Fipronil recognition by the FA1 site of human serum albumin**. In *Journal of Molecular Recognition*, Vol. 31, No. 8, 2018, DOI: 10.1002/jmr.2713
4. Daniele Toti, Gabriele Macari, Fabio Polticelli. **Protein-ligand binding site detection as an alternative route to molecular docking and drug repurposing**. In *Bio-Algorithms and Med-Systems*, Vol. 14, No. 2, 2018, DOI: 10.1515/bams-2018-0004
5. Giuseppe D'Aniello, Matteo Gaeta, Francesca Loia, Marek Reformat, Daniele Toti (CA). **An Environment for Collective Perception based on Fuzzy and Semantic Approaches**. In *Journal of Artificial Intelligence and Soft Computing Research*, Vol. 8, No. 3, 2018, DOI: 10.1515/jaiscr-2018-0013
6. Daniele Toti (CA), Andrea Longhi. **SEMANTO: a graphical ontology management system for knowledge discovery**. In *Journal of Ambient Intelligence and Humanized Computing*, Vol. 9, No. 4, 2018, DOI: 10.1007/s12652-017-0518-0
7. Elena di Muzio, Daniele Toti (JFA), Fabio Polticelli. **DockingApp: a user friendly interface for facilitated docking simulations with AutoDock Vina**. In *Journal of Computer-Aided Molecular Design*, Vol. 31, No. 2, 2017, DOI: 10.1007/s10822-016-0006-1
8. Daniele Toti (CA), Marco Rinelli. **RAN-Map: a system for automatically producing API layers from RDF schemas**. In *Journal of Ambient Intelligence and Humanized Computing*, Vol. 8, No. 2, 2017, DOI: 10.1007/s12652-016-0394-z
9. Viet Hung Le, Silvia Caprari, Massimiliano Bizai, Daniele Toti, Fabio Polticelli. **LIBRA: LIgand Binding site Recognition Application**. In *Bioinformatics*, Vol. 31, No. 24, 2015, DOI: 10.1093/bioinformatics/btv489

<sup>1</sup> CA = Corresponding Author; JFA = Joint First Author



10. Nicola Capuano, Andrea Longhi, Saverio Salerno, Daniele Toti. **Ontology-driven Generation of Training Paths in the Legal Domain**. In *IJET, Special Issue ALICE 2014*, Vol. 10, No. 7, 2015, DOI: 10.3991/ijet.v10i7.4609
11. Silvia Caprari, Daniele Toti (JFA), Le Viet Hung, Maurizio Di Stefano, Fabio Polticelli. **ASSIST: a fast versatile local structural comparison tool**. In *Bioinformatics*, Vol. 30, No. 7, 2014, DOI: 10.1093/bioinformatics/btt664
12. Angelo Gaeta, Matteo Gaeta, Paolo Piciocchi, Pierluigi Ritrovato, Daniele Toti, Agostino Vollero. **Evaluation of the human resources relevance in organisations via knowledge technologies and semantic social network analysis**. In *International Journal of Knowledge and Learning*, Vol. 9, No. 3, 2014, DOI: 10.1504/IJKL.2014.068918
13. Daniele Toti, Paolo Atzeni, Fabio Polticelli. **Automatic Protein Abbreviations Discovery and Resolution from Full-Text Scientific Papers: The PRAISED Framework**. In *Bio-Algorithms and Med-Systems (BAMS)*, Vol.8, No.1, 2012, ISSN (Online) 1896-530X, ISSN (Print) 1895-9091, DOI: 10.2478/bams-2012-0002

#### Refereed Conference Papers/Workshop Papers/Chapters

14. Daniele Toti (CA), Marco Rinelli. **On the road to speed-reading and fast learning with CONCEPTUM**. In *International Conference on Intelligent Networking and Collaborative Systems (INCoS) 2016, International Workshop on Adaptive Learning via Interactive, Collaborative and Emotional approaches (ALICE) 2016*, DOI: 10.1109/INCoS.2016.30
15. Daniele Toti (CA), Marco Rinelli. **Semi-automatic generation of an Object-Oriented API layer over semantic repositories**. In *International Conference on Intelligent Networking and Collaborative Systems (INCoS) 2015, International Workshop on Semantic Technologies in Ubiquitous, Massive and Smart Learning (STUMS) 2015*, DOI: 10.1109/INCoS.2015.22
16. Daniele Toti (CA), Andrea Longhi. **A visual ontology management system for handling, integrating and enriching semantic repositories**. In *International Conference on Intelligent Networking and Collaborative Systems (INCoS) 2015, International Workshop on Semantic Technologies in Ubiquitous, Massive and Smart Learning (STUMS) 2015*, DOI: 10.1109/INCoS.2015.23
17. Daniele Toti. **AQUEOS: A System for Question Answering over Semantic Data**. In *International Conference on Intelligent Networking and Collaborative Systems (INCoS) 2014, International Workshop on Semantic Technologies in Ubiquitous, Massive and Smart Learning (STUMS) 2014*, DOI: 10.1109/INCoS.2014.13
18. Nicola Capuano, Carmen De Maio, Daniele Toti. **A Methodology based on Commonsense Knowledge and Ontologies for the Automatic Classification of Legal Cases**. In *International Conference on Web Intelligence, Mining and Semantics (WIMS) 2014*, DOI: 10.1145/2611040.2611048
19. Gaia Arosio, Giuliana Bagnara, Nicola Capuano, Elisabetta Fersini, Daniele Toti. **Ontology-driven Data Acquisition: Intelligent Support to Legal ODR Systems**. In *International Conference on Legal Knowledge and Information Systems (JURIX) 2013*, DOI: 10.3233/978-1-61499-359-9-25
20. Pierluigi Del Nostro, Francesco Orciuoli, Stefano Paolozzi, Pierluigi Ritrovato, Daniele Toti. **ARISTOTELE: A Semantic-driven Platform for Enterprise Management**. In *IEEE International Conference on Advanced Information Networking and Applications (AINA) 2013, International Workshop on Networked Virtual Enterprises (NetVe) 2013*, DOI: 10.1109/WAINA.2013.43
21. Pierluigi Del Nostro, Angelo Gaeta, Stefano Paolozzi, Pierluigi Ritrovato, Daniele Toti. **ARISTOTELE: An Environment for Managing Knowledge-Intensive Enterprises**. In *Symposium on Advanced Database Systems (SEBD) 2013*
22. Daniele Toti, Paolo Atzeni and Fabio Polticelli. **A Knowledge Discovery Methodology For Semantic Categorization of Unstructured Textual Sources**. In *International Conference on Signal Image Technology and Internet Systems (SITIS) 2012, Workshop on Methods, Models and Technology for Semantic-driven Knowledge Building (MTSK) 2012*, DOI: 10.1109/SITIS.2012.240
23. Pierluigi Del Nostro, Francesco Orciuoli, Stefano Paolozzi, Pierluigi Ritrovato, Daniele Toti. **A Semantic-Based Architecture for Managing Knowledge-Intensive Organizations: The ARISTOTELE Platform**. In *International Conference on Web Information System Engineering (WISE) 2012, Engineering the Semantic Enterprise (ESE) Workshop 2012*, DOI: 10.1007/978-3-642-38333-5\_15
24. Paolo Atzeni, Fabio Polticelli and Daniele Toti. **Knowledge Discovery from Textual Sources by using Semantic Similarity – Extended Abstract**. In *Symposium on Advanced Database Systems (SEBD) 2012*
25. Paolo Atzeni, Fabio Polticelli and Daniele Toti. **Automatic Discovery and Resolution of Protein Abbreviations from Full-Text Scientific Papers: A Light-Weight Approach Towards Data Extraction from Unstructured Biological Sources – Extended Abstract**. In *Symposium on Advanced Database Systems (SEBD) 2011*
26. Paolo Atzeni, Fabio Polticelli and Daniele Toti. **Experimentation of an Automatic Resolution Method for Protein Abbreviations in Full-Text Papers**. In *ACM Conference on Bioinformatics, Computational Biology and Biomedicine (ACM-BCB) 2011*, DOI: 10.1145/2147805.2147871
27. Paolo Atzeni, Fabio Polticelli and Daniele Toti. **An Automatic Identification and Resolution System for Protein-related Abbreviations in Scientific Papers**. In *European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBio) 2011*, DOI: 10.1007/978-3-642-20389-3\_18
28. Paolo Atzeni, Fabio Polticelli and Daniele Toti. **A Framework for Semi-Automatic Identification, Disambiguation and Storage of Protein-related Abbreviations in Scientific Literature**. In *International Conference on Data Engineering (ICDE) 2011, Data Lifecycle (DaLi) Workshop 2011*, DOI: 10.1109/ICDEW.2011.5767646
29. Paolo Atzeni, Giorgio Gianforme and Daniele Toti. **Polymorphism in Datalog and Inheritance in a Metamodel – Extended Abstract**. In *Symposium on Advanced Database Systems (SEBD) 2010*
30. Paolo Atzeni, Giorgio Gianforme and Daniele Toti. **Polymorphism in Datalog and Inheritance in a Metamodel**. In *Foundations of Information and Knowledge Systems 2010*, DOI: 10.1007/978-3-642-11829-6\_10

#### Refereed Symposium Papers/Posters/Abstracts

31. Daniele Toti, Viet Hung Le, Valentina Tortosa, Valentina Brandi, Fabio Polticelli. **LIBRA-WA: a web application for ligand binding site detection and protein function recognition**. In *3DSIG 2017 Structural Bioinformatics and Computational Biophysics*
32. Silvia Caprari, Daniele Toti, Le Viet Hung, Maurizio Di Stefano, Fabio Polticelli. **ASSIST: a local structural comparison tool for protein function recognition**. In *Bioinformatics Italian Society (BITS) annual meeting 2014* (received the "Best Poster" award)





33. Daniele Toti, Paolo Atzeni, Fabio Polticelli. **Knowledge Detection from Semi-structured Sources using Semantic Similarity**. In *TRIPLE Winter School 2012*
34. Daniele Toti, Paolo Atzeni, Fabio Polticelli. **A Domain-Independent Automatic System for Abbreviation Identification, Resolution and Entity Recognition from Full-Text Papers**. In *TRIPLE Winter School 2012*

Book/Journal/Magazine/Conference Refereeing and Technical Committee membership

- *Computer Standards and Interfaces, International Journal of Computing and Digital Systems (IJCDS' V3), IEEE International Conference on Computer, Communication, and Control Technology (I4CT) 2014, International Conference on Industrial Automation, Information and Communication Technology (IAICT) 2014, International Workshop on the Design and Performance of Networks on Chip (DPNoC) 2014, International Workshop on Mobile Applications (MobiApps) 2014, International Conference on Electronic Publishing and Information Technology (ICEPIT) 2014, International Symposium on Signal Processing and Intelligent Recognition Systems (SIRS) 2014, International Conference on Technology, Informatics, Management, Engineering & Environment (TIME-E) 2013, 2014, International Conference on Robotics, Biomimetics, Intelligent Computational Systems (ROBIONETICS) 2013, 2014, The Sixth International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS) 2012, IEEE Conference on Control, Systems & Industrial Informatics (ICCSII) 2012, 2013, IEEE Student Conference on Research and Development (SCoReD) 2012, International Conference on Signal Image Technology and Internet Systems (SITIS) 2012, etc.*

## SCIENTIFIC PARAMETERS

- Academic age: 8
- Total publications: 34 (actual) / 29 (currently in SCOPUS)
- Total Impact factor: 32.44
- Total Citations: 145 (actual) / 124 (currently in SCOPUS)
- H-index: 7 (currently in SCOPUS)

## TEACHING EXPERIENCE

### Set 2017 – present

**Contract Professor/Lecturer ("Professore a contratto")**, Niccolò Cusano University

Courses:

- Text Mining & Natural Language Processing (5 CFU), post-graduate course, 2017-2018
- Computer Networks – Security mechanisms (10 CFU), post-graduate course, 2017-2018
- Operational management of computers and networks (5 CFU), post-graduate course, 2017-2018

Activities:

- **Lecturer ("Docente")**
- **Student tutor ("Tutor")**
- **Committee member for Thesis defense ("Commissario")**

### Oct 2009 – present

**Subject Expert, Honorary Teaching and Research Assistant ("Cultore della materia pro bono")**, Roma Tre University

Activities:

- **Secondary advisor ("Correlatore")** for Bachelor's and Master's Thesis candidates
- **Outside examiner ("Controrelatore")** for Bachelor's and Master's Thesis candidates
- **Committee member ("Commissario di Laurea")** for Bachelor's and Master's Thesis sessions

### Jan 2016 – Apr 2016

**Lecturer, student tutor ("Responsabile del corso, tutor")**, Roma Tre University

Course:

- Fundamentals of Computer Science and Object-Oriented Programming, Ph.D-level laboratory course, Theoretical Biology and Bioinformatics Laboratory, 2016-2017

### Dec 2014 – Jan 2016

**Lecturer ("Erogazione di seminari su invito")**, Roma Tre University

Courses:

- Intelligent Systems for the Internet, Master's level course, 2015-2016
- Intelligent Systems for the Internet, Master's level course, 2014-2015

### Dec 2010 – Feb 2012

**Exam committee member ("Commissario d'Esame")**, Roma Tre University

Course:

- Information Systems, Master's level course, 2011-2012
- Information Systems, Master's level course, 2010-2011

### Mar 2010 – Jun 2011

**Lecturer (practical lessons), student tutor ("Esercitatore, tutor")**, Roma Tre University

Courses:

- Database Systems II, Master's level course, 2010-2011
- Database Systems II, Master's level course, 2009-2010



## SUMMARY OF ACADEMIC AND RESEARCH APPOINTMENTS

<b>May 2008 – Lug 2008</b>	Research Assistant, Roma Tre University, Department of Computer Science and Automation
<b>Nov 2008 – Ott 2011</b>	Ph.D. Student, Roma Tre University, Department of Computer Science and Automation
<b>Dec 2011 – Feb 2012</b>	Research Assistant, Roma Tre University, Department of Computer Science and Automation
<b>Feb 2012 – Jan 2013</b>	Research Scientist, Roma Tre University, Department of Computer Science and Automation (Post-Doctoral, <b>L. 240/2010, 12 months</b> )
<b>Sep 2011 – Dec 2012</b>	Research Scientist, CRMPA
<b>Apr 2013 – Dec 2013</b>	Research Scientist, University of Salerno, Department of Computer and Electrical Engineering and Applied Mathematics: <i>"Modelli e metodologie di Knowledge Representation, Extraction e Discovery"</i> , eJRM project (Post-Doctoral, <b>L. 240/2010, 8 months</b> )
<b>Dec 2013 – Oct 2014</b>	Senior Research Scientist, University of Salerno, Department of Computer and Electrical Engineering and Applied Mathematics: <i>"Modellazione formale delle competenze: definizione di un modello ontologico per la rappresentazione delle competenze professionali"</i> , SIRET project (Post-Doctoral, <b>L. 240/2010, 10 months</b> )
<b>Oct 2014 – Sep 2015</b>	Senior Research Scientist, University of Salerno, Department of Computer and Electrical Engineering and Applied Mathematics: <i>"Modelli e metodologie di Knowledge Management in ambito giuridico"</i> , eJRM project (Post-Doctoral, <b>L. 240/2010, 12 months</b> )
<b>Oct 2015 – Jul 2016</b>	Senior Research Scientist, University of Salerno, Department of Computer and Electrical Engineering and Applied Mathematics: <i>"Rappresentazione e gestione semantica delle competenze"</i> , SIRET project (Post-Doctoral, <b>L. 240/2010, 9 months</b> )
<b>Jul 2016 – Mar 2017</b>	Senior Research Scientist, Roma Tre University, Department of Engineering (Post-Doctoral, <b>L. 240/2010, 9 months</b> )
<b>Jul 2017 – present</b>	Contract Professor/Lecturer, Niccolò Cusano University
<b>Jan 2013 – present</b>	Senior Research Scientist, Roma Tre University, Department of Sciences, Theoretical Biology and Bioinformatics Lab (Research Fellow, pro-bono)

## TECHNICAL SKILLS

- **Software engineering and Object-oriented analysis and design** (advanced), by properly understanding and applying well-known design and architectural patterns (GRASP, GoF, POSA etc.)
- **Java development** (advanced): Java SE 6/EE 5, e.g. POJO, JSP/Servlets, Event-based GUIs etc.  
Certifications:
  - **Sun Certified Programmer for the Java Platform, SE 6 (SCJP)** awarded by Sun Microsystems
  - **Sun Certified Web Component Developer for the Java Platform, EE 5 (SCWCD)** awarded by Sun Microsystems
  - **Oracle Java EE 5 Business Component Developer Certified Professional** awarded by Oracle
  - **Oracle Java EE 5 Web Services Developer Certified Professional** awarded by Oracle
- **Database design and SQL programming** (advanced)  
Certifications:
  - **Oracle Database SQL Certified Expert** awarded by Oracle
  - **Oracle Database 11g Administrator Certified Associate (OCA)** awarded by Oracle
- **Grant application writing and management** (advanced)
- **Project management** (upper-intermediate)
- **Web designing** (upper-intermediate): HTML, CSS
- **SPARQL querying and updating** (upper-intermediate)
- **C# programming** (intermediate)
- Proficient in understanding and speaking **English** and performing English-Italian translations and vice versa
- Proficient in using the **Eclipse** development platform
- Competent in using **Microsoft VisualStudio 2010**
- Competent in **Oracle, MySQL, PostgreSQL, Microsoft SQL Server** database management systems and **HSQldb** embedded database systems
- Competent in using application servers (**Apache Tomcat, Sun Java System/Glassfish, Oracle/BEA Weblogic**)
- Competent in using components of the **Spring** framework
- Competent in **Linux/Unix, Windows** operating system environments and bash programming
- Competent in Graphical Editing (**Adobe Photoshop, Corel PhotoPaint** in particular)
- Competent in using word processors (**Microsoft Word, OpenOffice Writer**), datasheet applications (**Microsoft Excel**), slideshow composers (**Microsoft PowerPoint**), database tools (**Microsoft Access**), modeling tools (**Microsoft Visio**), project management tools (**Microsoft Project**)
- Basic knowledge of Video-Editing tools (**Ulead VideoStudio**)
- Known programming languages: **Java** (advanced), **SQL** (advanced), **HTML/CSS** (upper-intermediate), **C#** (intermediate), **XML/XSTL** (basic), **ANSI-C** (basic), **Datalog** (basic), **ASP.NET** (basic)

## CERTIFICATION SUMMARY

- **Certificate of Proficiency in English**, University of Cambridge, January 2009
- **Sun Certified Programmer for the Java Platform, SE 6 (SCJP)**, Sun Microsystems, April 2010
- **Sun Certified Web Component Developer for the Java Platform, EE 5 (SCWCD)**, Sun Microsystems, June 2010
- **Oracle Java EE 5 Business Component Developer Certified Professional (OCP)**, Oracle, April 2011
- **Oracle Java EE 5 Web Services Developer Certified Professional (OCP)**, Oracle, June 2011
- **Oracle Database SQL Certified Expert (OCE)**, Oracle, August 2010
- **Oracle Database 11g Administrator Certified Associate (OCA)**, Oracle, September 2010
- **Certified ENDAS Trainer for Goju-Ryu Karate**, ENDAS Lazio, December 2012

## SCIENTIFIC RESPONSIBILITY FOR INTERNATIONAL AND NATIONAL PROJECTS

- Wheesbee - Information Retrieval and Extraction for supporting organizations in technological innovation processes, IT PON framework 2017; Role: **Research Scientist, Natural Language Analyzer**
- DANTE - Detecting and ANalysing TErrorist-related online contents and financing activities, EC Horizon 2020, H2020-FCT-2015; Role: **Research Scientist, Natural Language Analyzer**
- LASIE - Large Scale Information Exploitation of Forensic Data, EC Framework Programme 7, FP7-SEC-2013-1; Role: **Research Scientist, Natural Language Analyzer**
- SURVANT - SURveillance Video Archives iNvestigation assistant, H2020-FTIPilot-2015-1, Role: **Research Scientist**
- MODERN - Architectural Models for the Definition, Execution and Re-engineering of User-Centric processes in the Organizations, IT PON framework, PON01\_01949; Role: **Research Scientist**
- SIRET - Integrated System for Recruiting and Training, IT PON framework, PON01\_03024; Role: **Research Scientist**
- eJRM - electronic Justice Relationship Management, IT PON framework, PON01\_01286; Role: **Research Scientist**
- ARISTOTELE - Personalised Learning & Collaborative Working Environments Fostering Social Creativity and Innovations Inside the Organisations, EC Framework Programme 7, FP7-ICT-2009-5; Role: **Research Scientist, Software Architect**

## INVITED SEMINARS AND LECTURES

- "Knowledge Extraction and Management for the biomedical, legal and corporate domains", March 7<sup>th</sup>, 2017, GREYC Lab, University of Caen Normandy, France
- "Advanced Bioinformatics applications for protein function identification and biological knowledge discovery", January 21<sup>st</sup>, 2016, Department of Engineering, Roma Tre University, Italy
- "From PRAISED to CONCEPTUM: Information Extraction and Knowledge Discovery Applications for Biosciences and Other Domains", January 19<sup>th</sup>, 2015, Department of Engineering, Roma Tre University, Italy

## SPEAKER IN INTERNATIONAL CONFERENCES

- 8<sup>th</sup> International Conference on Intelligent Networking and Collaborative Systems (INCoS 2016), September 7-9, 2016, Ostrava, Czech Republic
- 7<sup>th</sup> International Conference on Intelligent Networking and Collaborative Systems (INCoS 2015), September 2-4, 2015, Taipei, Taiwan
- 6<sup>th</sup> International Conference on Intelligent Networking and Collaborative Systems (INCoS 2014), September 10-12, 2014, Salerno, Italy
- 27<sup>th</sup> IEEE International Conference on Advanced Information Networking and Applications (AINA 2013), March 25-28, 2013, Barcelona, Spain
- 8<sup>th</sup> International Conference on Signal Image Technology and Internet Based Systems (SITIS 2012), November 25-29, 2012, Sorrento, Italy
- 20<sup>th</sup> Italian Symposium on Advanced Database Systems (SEBD 2012), June 24-27, 2012, Venice, Italy
- 2<sup>nd</sup> ACM Conference on Bioinformatics, Computational Biology and Biomedicine (ACM-BCB 2011), August 1-3, 2011, Chicago, United States of America
- 19<sup>th</sup> Italian Symposium on Advanced Database Systems (SEBD 2011), June 26-29, 2011, Maratea, Italy
- 9<sup>th</sup> European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBio 2011), April 27-29, 2011, Turin, Italy
- 27<sup>th</sup> International Conference on Data Engineering (ICDE 2011), April 11-16, 2011, Hannover, Germany
- 18<sup>th</sup> Italian Symposium on Advanced Database Systems (SEBD 2010), June 20-23, 2010, Rimini, Italy
- 18<sup>th</sup> European-Japanese Conference on Information Modelling and Knowledge Bases (EJC 2008), June 2-6, 2008, Tsukuba, Japan

## AWARDS AND INTERNATIONAL MEMBERSHIPS

- Member of the Association for Computing Machinery (ACM, [www.acm.org](http://www.acm.org)) since 2016
- Member of the Institute of Electrical and Electronics Engineers (IEEE, [www.ieee.org](http://www.ieee.org)) since 2016
- Member of the International Society for Computational Biology (ISCB, [www.iscb.org](http://www.iscb.org)) since 2016
- "Best Poster" award at the Bioinformatics Italian Society (BITS) annual meeting 2014

## INTERESTS AND CURRENT ACTIVITIES

- Sport: Goju-Ryu Karate, Shodan (1<sup>st</sup> Dan) black belt rank issued by the International Karate-do Organization (I.K.O.) led by Sensei Gonnohyoe Yamamoto Soshihan 10<sup>th</sup> Dan, semi-agonistic activity. Obtained several important rankings in regional, national and international competitions, including World Karate Championship for Clubs 2005, Vasto,



Italy (2<sup>nd</sup> place in Kata), Italian Budo Meeting 2005, Bellaria-Igea Marina, Italy (1<sup>st</sup> place in Kata), Italian Championship 2005, Rome, Italy (1<sup>st</sup> place in Kata), Italian FESIK Kyu Championship 2006, Ferentino, Italy (2<sup>nd</sup> place in Kata), Italian ENDAS Championship 2006, Gaeta, Italy (2<sup>nd</sup> place in Kata), Italian MSP Championship 2007, Gaeta, Italy (1<sup>st</sup> place in Kata, 3<sup>rd</sup> place in Team Kata), Italian US-ACLI Championship 2009, Pesaro, Italy (2<sup>nd</sup> place in Kata), World Karate Championship for Clubs 2009, Lignano, Italy (4<sup>th</sup> place in Kata), ENDAS Regional Championship 2011 (1<sup>st</sup> place in Kata) etc. Currently serving as a Certified ENDAS Trainer for Goju-Ryu Karate at the Yamamoto-kan Dojo in Rome led by Sensei Mauro Cancellieri Kyoshi 8<sup>th</sup> Dan.

- Photography, literature, music, chess
- Webmaster and developer of a no-profit English website for videogaming activities, online since 1999, with 200000+ visitors up-to-date
- Founder and active member of an on-line community for videogaming activities, which counted hundreds of members back in its days
- Founder, administrator and moderator of an online message board
- Author of four Italian novels (the latest of which being a 670-page-long psychological fantasy novel), a few short-stories and several poems in Italian and English
- Responsible for the English-Italian translation and adaptation of several videogame scripts (e.g. Final Fantasy VII, Xenogears etc.) and pen-and-paper RPGs (e.g. Star Wars RPG) for leisure purposes and the online community

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I hereby authorize treatment of the above personal data according to the Italian law (legislative decree 196/2003 and subsequent)

06/08/2018

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