

Elenco numerato delle pubblicazioni:

- 1. Packet Order Matters! Improving Application Performance by Deliberately Delaying Packets**
H. Ghasemirahni, T. Barbette, G. Katsikas, A. Farshin, M. Girondi, A. Roozbeh, M. Chiesa,
G. Q. Maguire Jr., D. Kostic
Accepted to USENIX Networked Systems Design and Implementation (NSDI), 2022
File: 01_2022-order-matters-nsdi.pdf
- 2. Cheetah: A High-Speed Load-Balancer Design with Guaranteed Per-Connection-Consistency**
T. Barbette, E. Wu,, D. Kostic, G. Q. Maguire Jr., P. Papadimitratos, M. Chiesa
In IEEE Transactions on Networking, 2021
10.1109/TNET.2021.3113370
File: 02_2021-cheetah-ton.pdf
- 3. A survey of Fast Recovery Mechanisms in the Data Plane**
M. Chiesa, A. Kamisiński, J. Rak, G. Retvari, S. Schmid
In IEEE Communications Surveys and Tutorials (COMST), 2021
10.1109/COMST.2021.3063980
File: 03_2021-frr-comst.pdf
- 4. Fast ReRoute on Programmable Switches**
M. Chiesa, R. Sedar, G. Antichi, M. Borokhovich, A. Kamisiński, G. Nikolaidis, S. Schmid
In IEEE/ACM Transactions on Networking (ToN), 2021
DOI: 10.1109/TNET.2020.3045293
File: 04_2021-purr-ton.pdf
- 5. Oblivious Routing in IP Networks**
M. Chiesa, G. Retvari, M. Schapira
In IEEE/ACM Transactions on Networking (ToN), 2018
DOI: 10.1109/TNET.2018.2832020
File: 05_2018-oblivious-IP-ton.pdf
- 6. Dynam-IX: a Dynamic Interconnection eXchange**
P. Marcos, M. Chiesa, L. Muller, P. Kathiravelu, C. Dietzel, M. Canini, M. Barcellos
In ACM International Conference on emerging Networking EXperiments and Technologies
(CoNEXT), 2018
DOI: 10.1145/3281411.3281419
File: 06_2018-dynamix-conext.pdf
- 7. Traffic engineering with Equal-Cost-Multipath: An algorithmic perspective**
M. Chiesa, G. Kindler, M. Schapira
In IEEE/ACM Transactions on Networking (ToN), 2017
DOI: 10.1109/TNET.2016.2614247
File: 07_2017-te-ecmp-ton.pdf
- 8. SIXPACK: Securing Internet eXchange Points Against Curious onlookers**
M. Chiesa, D. Demmler, M. Canini, M. Schapira, T. Schneider
In ACM International Conference on emerging Networking EXperiments and Technologies
(CoNEXT), 2017
DOI: 10.1145/3143361.3143362
File: 08_2017-sixpack-conext.pdf

9. Decentralized Fast Consistent Updates

T. D. Nguyen, M. Chiesa, M. Canini
In ACM Symposium on SDN Research (SOSR), 2017
DOI: 10.1145/3050220.3050224
File: 09_2017-ez-segway-sosr.pdf

10. On the Resiliency of Static Forwarding Tables

M. Chiesa, I. Nikolaevskiy, S. Mitrovic, A. Gurtov, A. Madry, M. Schapira, S. Shenker
In IEEE/ACM Transactions on Networking (ToN), 2017
DOI: 10.1109/TNET.2016.2619398
File: 10_2017-resiliency-ton.pdf

11. Analysis of Country-wide Internet Outages Caused by Censorship

A. Dainotti, C. Squarcella, E. Aben, K. C. Claffy, M. Chiesa, M. Russo, A. Pescapé
In IEEE/ACM Transactions on Networking (ToN), 2014.
DOI: 10.1109/TNET.2013.2291244
File: 11_2014-censorship-ton.pdf

12. Using Routers to Build Logic Circuits: How Powerful is BGP?

M. Chiesa, L. Cittadini, L. Vanbever, S. Vissicchio, G. Di Battista
In IEEE International Conference on Network Protocols (ICNP), 2013
DOI: 10.1109/ICNP.2013.6733584
File: 12_2013-turing-bgp-icnp.pdf

The Role of Routing Policies in the Internet: Stability, Security, and Load-Balancing

M. Chiesa,
Doctoral thesis, Roma Tre University, 2014
File: chiesa-phd-thesis.pdf

Elenco Pubblicazioni

Giordano Da Lozzo giordano.dalozzo@uniroma3.it

TESI DI DOTTORATO:

- Giordano Da Lozzo. Planar Graphs with Vertices in Prescribed Regions: models, algorithms, and complexity. **PhD thesis**, Università degli Studi "Roma Tre", Dottorato di Ricerca in Ingegneria, Sezione Informatica ed Automazione, XXVII Ciclo, 2015.

12 PUBBLICAZIONI PRESENTATE:

1. Giordano Da Lozzo, David Eppstein, Michael T. Goodrich, Siddharth Gupta: C-Planarity Testing of Embedded Clustered Graphs with Bounded Dual Carving-Width. **Algorithmica** 83(8): 2471-2502 (2021)
 - Scimago Journal & Country Rank: Algorithmica (Year 2021): Not yet available for 2021
2. Patrizio Angelini, Michael A. Bekos, Franz J. Brandenburg, Giordano Da Lozzo, Giuseppe Di Battista, Walter Didimo, Michael Hoffmann, Giuseppe Liotta, Fabrizio Montecchiani, Ignaz Rutter, and Csaba D. Tóth. Simple k -planar graphs are simple $(k+1)$ -quasiplanar. **Journal of Combinatorial Theory, Series B**, 142:1–35, 2020.
 - Scimago Journal & Country Rank: Journal of Combinatorial Theory. Series B (Year 2020): Computational Theory and Mathematics **Q1** Discrete Mathematics and Combinatorics **Q1** Theoretical Computer Science **Q1**
3. Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, Vincenzo Roselli: Upward Planar Morphs. **Algorithmica** 82(10): 2985-3017 (2020)
 - Scimago Journal & Country Rank: Algorithmica (Year 2020): Computer Science (miscellaneous) **Q1**
4. Patrizio Angelini and Giordano Da Lozzo. Clustered Planarity with Pipes. **Algorithmica**, 81(6): 2484–2526, 2019.
 - Scimago Journal & Country Rank: Algorithmica (Year 2019): Computer Science (miscellaneous) **Q1**
5. Giordano Da Lozzo and Ignaz Rutter. Planarity of streamed graphs. **Theoretical Computer Science**, 799:1–21, 2019.
 - Scimago Journal & Country Rank: Theoretical Computer Science (Year 2019): Computer Science (miscellaneous) **Q1**
6. Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Computing node-trix representations of clustered graphs. **Journal of Graph Algorithms and Applications**, 22(2):139–176, 2018.
 - Scimago Journal & Country Rank: Journal of Graph Algorithms and Applications (Year 2018): Computer Science (miscellaneous) **Q1**
7. Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Valentino Di Donato, Philipp Kindermann, Günter Rote, and Ignaz Rutter. Windrose planarity: Embedding graphs with direction-constrained edges. **ACM Transactions on Algorithms**, 14(4):54:1–54:24, 2018.
 - Scimago Journal & Country Rank: ACM Transactions on Algorithms (Year 2018): Mathematics (miscellaneous) **Q1**
8. Soroush Alamdari, Patrizio Angelini, Fidel Barrera-Cruz, Timothy M. Chan, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Penny Haxell, Anna Lubiw, Maurizio Patrignani, Vincenzo Roselli, Sahil Singla, and Bryan T. Wilkinson. How to morph planar graph drawings. **SIAM Journal on Computing**, 46(2):824–852, 2017.
 - Scimago Journal & Country Rank: SIAM Journal on Computing (Year 2017): Computer Science (miscellaneous) **Q1**

9. Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Strip planarity testing for embedded planar graphs. **Algorithmica**, 77(4):1022–1059, 2017.
- Scimago Journal & Country Rank: Algorithmica (Year 2017): Computer Science (miscellaneous) **Q1**
10. Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Intersection-link representations of graphs. **Journal of Graph Algorithms and Applications**, 21(4):731–755, 2017.
- Scimago Journal & Country Rank: Journal of Graph Algorithms and Applications (Year 2017): Computer Science (miscellaneous) **Q1**
11. Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Vincenzo Roselli. The importance of being proper: (in clustered-level planarity and t-level planarity). **Theoretical Computer Science**, 571:1–9, 2015.
- Scimago Journal & Country Rank: Theoretical Computer Science (Year 2015): Computer Science (miscellaneous) **Q1**
12. Patrizio Angelini, Giordano Da Lozzo, and Daniel Neuwirth. Advancements on SEFE and partitioned book embedding problems. **Theoretical Computer Science**, 575:71–89, 2015.
- Scimago Journal & Country Rank: Theoretical Computer Science (Year 2015): Computer Science (miscellaneous) **Q1**

Elenco numerato delle pubblicazioni scientifiche presentate

Candidato: Fabio D'Andreagiovanni

(NOTA: per ogni rivista si riporta: 1) l'Impact Factor recuperato dal sito ufficiale della rivista alla data 27/10/2021, 2) il numero di citazioni recuperato dalla banda dati Scopus alla data 27/10/2021)

Indicatori complessivi delle pubblicazioni presentate elencate di seguito:

- **Numero totale delle citazioni:** **362**
- **Numero medio di citazioni per pubblicazione:** **30.16**
- **Impact factor totale:** **60.657**
- **Impact factor medio** (calcolato dividendo l'impact factor totale per 11, così da considerare i soli articoli in rivista ed escludere il contributo in atti di convegno): **5.514**

Articoli in rivista

1. L. Chiaraviglio, **F. D'Andreagiovanni**, W. Liu, J. A. Gutierrez, N. Blefari-Melazzi, K.R. Choo, M. Alouini, "Multi-Area Throughput and Energy Optimization of UAV-aided Cellular Networks Powered by Solar Panels and Grid", **IEEE Transactions on Mobile Computing** (IEEE, ISSN: 1536-1233), vol. 20, pp. 2427-2444, 2021, DOI: 10.1109/TMC.2020.2980834
Impact Factor: 5.577
Numero di citazioni: 7
2. R. G. Garroppo, M.G. Scutellà, **F. D'Andreagiovanni**, "Robust green Wireless Local Area Networks: A matheuristic approach", **Journal of Network and Computer Applications** (Elsevier, ISSN: 1084-8045) vol. 163, 102657, 2020, DOI: 10.1016/j.jnca.2020.102657
Impact Factor: 6.281
Numero di citazioni: 2
3. L. Chiaraviglio, **F. D'Andreagiovanni**, K.R. Choo, F. Cuomo, S. Colonnese, "Joint Optimization of Area Throughput and Grid-Connected Microgeneration in UAV-Based Mobile Networks", **IEEE Access** (IEEE, ISSN: 2169-3536) vol. 7, pp. 69545-69558, 2019, DOI: 10.1109/ACCESS.2019.2920065
Impact Factor: 3.367
Numero di citazioni: 7
4. L. Chiaraviglio, **F. D'Andreagiovanni**, C. Canali, R. Lancellotti, M. Shojafar, N. Blefari Melazzi, "An Approach to Balance Maintenance Cost and Electricity Consumption in Cloud Data Centers", **IEEE Transactions on Sustainable Computing** (IEEE, ISSN: 2377-3782), vol. 2(3), pp. 274-288, 2018, DOI: 10.1109/TSUSC.2018.2838338
Impact Factor: non ancora assegnato alla rivista
Numero di citazioni: 22
5. **F. D'Andreagiovanni**, F. Mett, A. Nardin, J. Pulaj, "Integrating LP-guided variable fixing with MIP heuristics in the robust design of hybrid wired-wireless FTTx access networks", **Applied Soft Computing** (Elsevier, ISSN: 1568-4946), vol. 61, pp. 1074-1087, 2017, DOI: 10.1016/j.asoc.2017.07.018
Impact Factor: 6.725
Numero di citazioni: 22

6. A. Marotta, **F. D'Andreagiovanni**, A. Kassler, E. Zola,
 "On the Energy Cost of Robustness for Green Virtual Network Function Placement in 5G Virtualized Infrastructures",
Computer Networks (Elsevier, ISSN: 1389-1286) vol. 125, pp. 64-75, 2017, DOI: 10.1016/j.comnet.2017.04.045
Impact Factor: 4.474
Numero di citazioni: 41

7. A. Marotta, E. Zola, **F. D'Andreagiovanni**, A. Kassler,
 "A fast robust optimization-based heuristic for the deployment of green virtual network functions",
Journal of Network and Computer Applications (Elsevier, ISSN: 1084-8045) vol. 95, pp. 42-53, 2017,
 DOI: 10.1016/j.jnca.2017.07.014
Impact Factor: 6.281
Numero di citazioni: 22

8. **F. D'Andreagiovanni**, A. Nardin,
 "Towards the fast and robust optimal design of Wireless Body Area Networks",
Applied Soft Computing (Elsevier, ISSN: 1568-4946), vol. 37, pp. 971-982, 2015, DOI: 10.1016/j.asoc.2015.04.037
Impact Factor: 6.725
Numero di citazioni: 53

9. **F. D'Andreagiovanni**, J. Krolikowski, J. Pulaj,
 "A fast hybrid primal heuristic for Multiband Robust Capacitated Network Design with Multiple Time Periods"
Applied Soft Computing (Elsevier, ISSN: 1568-4946) vol. 26, pp. 497-507, 2015, DOI: 10.1016/j.asoc.2014.10.016
Impact Factor: 6.725
Numero di citazioni: 53

10. T. Bauschert, C. Büsing, **F. D'Andreagiovanni**, A. Koster, M. Kutschka, U. Steglich,
 "Network Planning under Demand Uncertainty with Robust Optimization",
IEEE Communications Magazine (IEEE, ISSN: 0163-6804), vol. 52 (2), pp. 178-185, 2014,
 DOI: 10.1109/MCOM.2014.6736760
Impact Factor: 9.619
Numero di citazioni: 49

11. **F. D'Andreagiovanni**, C. Mannino, A. Sassano,
 "GUB Covers and Power-Indexed Formulations for Wireless Network Design",
Management Science (INFORMS, ISSN: 0025-1909) vol. 59 (1), pp. 142-156, 2013, DOI: 10.1287/mnsc.1120.1571
Impact Factor: 4.883
Numero di citazioni: 38

Contributi in atti di convegno

12. A. Trotta, **F. D'Andreagiovanni**, M. Di Felice, E. Natalizio, K. Chowdhury,
 "When UAVs Ride a Bus: Towards Energy-efficient City-scale Video Surveillance",
IEEE INFOCOM 2018 (IEEE International Conference on Computer Communications), IEEE Xplore, 2018,
 DOI: 10.1109/INFOCOM.2018.8485863
Numero di citazioni: 46

Luogo e data,
 COMPIEGNE, 27/10/2021

Pierangelo Di Sanzo

Elenco numerato delle pubblicazioni e tesi di dottorato

1. Pierangelo Di Sanzo, Dimiter R. Avresky, Alessandro Pellegrini (2021). Autonomic Rejuvenation of Cloud Applications as a Countermeasure to Software Anomalies. SOFTWARE, PRACTICE AND EXPERIENCE, vol. 51, ISSN: 1097-024X, doi: 10.1002/spe.2908 - Articolo in rivista
2. Alessandro Pellegrini, Pierangelo Di Sanzo, Beatrice Bevilacqua, Gabriella Duca, Domenico Pascarella, Roberto Palumbo, Juan José Ramos, Miquel Àngel Piera, Gabriella Gigante (2020). Simulation-Based Evolutionary Optimization of Air Traffic Management. IEEE ACCESS, ISSN: 2169-3536, doi: 10.1109/ACCESS.2020.3021192 - Articolo in rivista
3. Romolo Marotta, Davide Tiriticco, Pierangelo Di Sanzo, Alessandro Pellegrini, Bruno Ciciani, Francesco Quaglia (2020). Mutable locks: Combining the best of spin and sleep locks. CONCURRENCY AND COMPUTATION, vol. 32, ISSN: 1532-0626, doi: 10.1002/cpe.5858 - Articolo in rivista
4. Matteo Principe, Tommaso Tocci, Pierangelo Di Sanzo, Francesco Quaglia, Alessandro Pellegrini (2020). A Distributed Shared Memory Middleware for Speculative Parallel Discrete Event Simulation. ACM TRANSACTIONS ON MODELING AND COMPUTER SIMULATION, vol. 30, ISSN: 1049-3301, doi: 10.1145/3373335 - Articolo in rivista
5. Di Sanzo, Pierangelo, Pellegrini, Alessandro, Sannicandro, Marco, Ciciani, Bruno, Quaglia, Francesco (2020). Adaptive Model-based Scheduling in Software Transactional Memory. IEEE TRANSACTIONS ON COMPUTERS, vol. 69, p. 621-632, ISSN: 0018-9340, doi: 10.1109/TC.2019.2954139 - Articolo in rivista
6. Pierangelo Di Sanzo (2017). Analysis, classification and comparison of scheduling techniques for software transactional memories. IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS, vol. 28, p. 3356-3373, ISSN: 1045-9219, doi: 10.1109/TPDS.2017.2740285 - Articolo in rivista
7. Rughetti, Diego, Di sanzo, Pierangelo, Ciciani, Bruno, Quaglia, Francesco (2017). Machine learning-based thread-parallelism regulation in software transactional memory. JOURNAL OF PARALLEL AND DISTRIBUTED COMPUTING, vol. 109, p. 208-229, ISSN: 0743-7315, doi: 10.1016/j.jpdc.2017.06.001 - Articolo in rivista
8. Di Sanzo, Pierangelo, Quaglia, Francesco, Ciciani, Bruno, Pellegrini, Alessandro, Didona, D., Romano, Paolo, Palmieri, Roberto, Peluso, Sebastiano (2015). A flexible framework for accurate simulation of cloud in-memory data stores. SIMULATION MODELLING PRACTICE AND THEORY, vol. 58, p. 219-238, ISSN: 1569-190X, doi: 10.1016/j.simpat.2015.05.011 - Articolo in rivista
9. Conoci, Stefano, Di Sanzo, Pierangelo, Alessandro Pellegrini, Bruno Ciciani, Francesco

Quaglia (2021). On Power Capping and Performance Optimization of Multi-threaded Applications. CONCURRENCY AND COMPUTATION, vol. 33, ISSN: 1532-0626, doi: 10.1002/CPE.6205 - Articolo in rivista

10. Di Sanzo, Pierangelo, Ciciani, Bruno, Palmieri, Roberto, Quaglia, Francesco, Paolo Romano (2012). On the analytical modeling of concurrency control algorithms for Software Transactional Memories: The case of Commit-Time-Locking. PERFORMANCE EVALUATION, vol. 69, p. 187-205, ISSN: 0166-5316, doi: 10.1016/j.peva.2011.05.002 - Articolo in rivista
11. Silvestri, Emiliano, Economo, Simone, Di Sanzo, Pierangelo, Pellegrini, Alessandro, Quaglia, Francesco (2017). Preemptive Software Transactional Memory. In: 2017 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID). PROCEEDINGS IEEE/ACM INTERNATIONAL SYMPOSIUM ON CLUSTER, CLOUD, AND GRID COMPUTING, p. 294-303, IEEE, ISBN: 978-1-5090-6610-0, ISSN: 2376-4414, Madrid; Spain, May 14 - 17, 2017, doi: 10.1109/CCGRID.2017.98 - Contributo in Atti di convegno
12. Di Sanzo, Pierangelo, Sannicandro, Marco, Ciciani, Bruno, Quaglia, Francesco (2016). Markov Chain-Based Adaptive Scheduling in Software Transactional Memory. In: 2016 IEEE International Parallel and Distributed Processing Symposium (IPDPS 2016). PROCEEDINGS - IEEE INTERNATIONAL PARALLEL AND DISTRIBUTED PROCESSING SYMPOSIUM, p. 373-382, Institute of Electrical and Electronics Engineers Inc., ISBN: 9781509021406, ISSN: 1530-2075, Chicago, Illinois; USA, 2016, doi: 10.1109/IPDPS.2016.104 - Contributo in Atti di convegno

Tesi di dottorato: “Performance Models of Concurrency Control Protocols for Transaction Processing Systems”. Sapienza Università di Roma. Dottorato di Ricerca in Ingegneria Informatica. XXIV Ciclo – 2011.

Roma, 27/10/2021

Il sottoscritto ANDREA RIBICHINI nell'ambito della procedura pubblica di selezione a n° 1 posto di ricercatore universitario a tempo determinato, ai sensi dell'Art. 24, c. 3 lettera b) della L. 240/2010, da assumere con contratto di lavoro subordinato, per la durata di tre anni per il settore concorsuale 09/H1, S.S.D. ING-INF/05 (Profilo B) presso il Dipartimento di Ingegneria dell'Università degli Studi Roma TRE, bandita con decreto rettorale disponibile sul sito pubblico <http://www.albopretorionline.it/uniroma/alboente.aspx> ed il cui avviso è pubblicato sulla Gazzetta Ufficiale n. 77 del 28/09/2021

ACCLUDE

alla propria domanda di partecipazione copia della propria Tesi di Dottorato:

A. Ribichini "Streaming Algorithms for Graph Problems", PhD Thesis.

Il sottoscritto acclude inoltre le seguenti pubblicazioni:

1. C. Demetrescu, A. Ribichini, M. Schaerf "Are Italian research assessment exercises size-biased?", pubblicato su *Scientometrics* 125 (2020), pagg. 533-549, Springer.
2. C. Demetrescu, I. Finocchi, A. Ribichini, M. Schaerf "On bibliometrics in academic promotions: a case study in computer science and engineering in Italy", pubblicato su *Scientometrics* 124 (2020), pagg. 2207-2228, Springer.
3. G. Ausiello, P. G. Franciosa, I. Lari, A. Ribichini "Max flow vitality in general and st-planar graphs", pubblicato su *Networks*, volume 74, numero 1 (2019), pagg. 70-78, Wiley.
4. C. Demetrescu, F. Lupia, A. Mendicelli, A. Ribichini, F. Scarcello, M. Schaerf "On the Shapley value and its application to the Italian VQR research assessment exercise", pubblicato su *Journal of Informetrics (JOI)*, volume 13, numero 1 (Febbraio 2019), pagg. 87-104, Elsevier.
5. C. Demetrescu, A. Ribichini, M. Schaerf "Accuracy of Author Names in Bibliographic Data Sources: An Italian Case Study", pubblicato su *Scientometrics*, volume 117, numero 3 (Dicembre 2018), pagg. 1777-1791, Springer.
6. F. Lupia, A. Mendicelli, A. Ribichini, F. Scarcello, M. Schaerf "Computing the Shapley value in allocation problems: approximations and bounds, with an application to the Italian VQR research assessment program", pubblicato su *Journal of Experimental & Theoretical Artificial Intelligence (JETAI)*, volume 30, numero 4 (2018), pagg. 505-524, Taylor & Francis.
7. G. Ausiello, P. G. Franciosa, G. F. Italiano, A. Ribichini "On Resilient Graph Spanners", pubblicato su *Algorithmica*, volume 74, numero 4 (Aprile 2016), pagg. 1363-1385, Springer.

8. C. Demetrescu, I. Finocchi, A. Ribichini "Reactive Imperative Programming with Dataflow Constraints", pubblicato su ACM Transactions on Programming Languages and Systems (TOPLAS), volume 37, numero 1 (Novembre 2014), articolo n. 3, ACM New York, NY, USA.
9. G. Ausiello, P. G. Franciosa, G. F. Italiano, A. Ribichini "Computing Graph Spanners in Small Memory: Fault-Tolerance and Streaming", pubblicato su Discrete Mathematics, Algorithms and Applications (DMAA), volume 2, numero 4 (2010), pagg. 591-605, World Scientific Publishing Company.
10. C. Demetrescu, B. Escoffier, G. Moruz, A. Ribichini "Adapting Parallel Algorithms to the W-Stream Model, with Applications to Graph Problems", pubblicato su Theoretical Computer Science (TCS), volume 411, numero 44-46 (Ottobre 2010), pagg. 3994-4004, Elsevier Science Publishers Ltd. Essex, UK.
11. C. Demetrescu, I. Finocchi, A. Ribichini "Trading Off Space for Passes in Graph Streaming Problems", pubblicato su ACM Transactions on Algorithms (TALG), volume 6, numero 1 (Dicembre 2009), pagg. 1-17, ACM New York, NY, USA.
12. G. Ausiello, C. Demetrescu, P. G. Franciosa, G. F. Italiano, A. Ribichini "Graph Spanners in the Streaming Model: an Experimental Study", pubblicato su Algorithmica, volume 55, numero 2 (Ottobre 2009), pagg. 346-374, Springer New York.

Roma, 01/10/2021

Marco Chiesa | Curriculum Vitae



Part I: Profile

Marco Chiesa is an assistant professor within the Network System Lab group of the Software and Computer Systems department at the KTH Royal Institute of Technology, Sweden. His research interests lie in computer networking and, more specifically, in aspects of **Internet protocols and architectures ranging from security and privacy to network design and optimization**, including Software Defined Networking (SDN) and Machine Learning (ML) approaches to these challenges, next-generation Internet eXchange Points (IXPs), cloud datacenters, and beyond.

Prior to joining KTH, Chiesa was a postdoctoral researcher in the INL networking group at the Université catholique de Louvain, supervised by Marco Canini, and a postdoctoral researcher at the Hebrew University of Jerusalem supervised by Michael Schapira. In 2013, he was a visiting scholar in the Berkeley NetSys Lab at the University of Berkeley supervised by Scott Shenker. He received his Ph.D. from Roma Tre University in 2014, advised by Prof. Giuseppe Di Battista. He was involved in the ENDEAVOUR (H2020 EU funded) project, intended to bring Software-Defined Networking (SDN) functionality to inter-domain routing on the Internet.

Chiesa has a proven track record in the research domain of Internet architectures and protocols. He has overall produced **14 journal and 21 conference** papers (8 and 11 as a first author, respectively). As a first author, the applicant published papers at some of the highly-ranked conferences on networking (3 papers at INFOCOM, 3 papers at CoNEXT, and one best paper at ICNP) as well as highly-ranked theory conferences (2 papers at ICALP) and second-tier networking conferences. He has presented his work at one of the flagship conferences in his field (ranked **A⁺⁺** by GGS) and gave numerous invited seminars at international universities (e.g., Cambridge, Stanford) and industries (e.g., Intel, Ericsson, NVidia). He has been invited to the prestigious workshop in Dagstuhl on “Programmable NETowrks” as well as an invited speaker at the recent NSF workshop on “Theory and practice of Internet Routing”. He has been invited three times as a topic preview speaker at ACM SIGCOMM 2018, 2019 and 2021, the flagship conference on networking.

Chiesa is a teacher and **course responsible** for one bachelor and three master courses in networking at KTH. He has supervised and examined over 20 theses. He is currently co-supervising four doctoral students. His most prominent recent paper in the role of a project supervisor is his USENIX NSDI 2020 work, one of the two flagship conferences in networked systems research beyond ACM SIGCOMM, which is a collaboration with one internal postdoc in the group and two master intern students from KTH.

Chiesa has received several international recognitions including the 2020 IEEE Communications Society **William R. Bennett Prize** for the best paper at the IEEE/ACM Transactions on Networking journal between 2017-2019, the **Facebook Networking Systems Research runner-up** award, the 2019 and 2020 Distinguished TPC member at IEEE Infocom (GGS rank **A⁺⁺**), the **IEEE ICNP 2013 best paper** (GGS rank A), and the 2012 **IETF Applied Networking Research Prize** for his work on Internet routing instruments for detecting country-wide censorship activity. His work within the ENDEAVOUR project has also been highlighted through the “Innovation Radar” excellence program

(i.e., Innovation Radar) of the European Union to a dynamic ecosystem of incubators, entrepreneurs, funding agencies and investors. He has received funding of approximately 500K EUR on the topic of high-performance datacenter networks and Machine Learning for network cybersecurity from the **Vinnova, KTH Digital Futures, and the Wallenberg AI, Autonomous Systems and Software** programs. Chiesa has filed **two provisional patents** as part of collaborations with Ericsson. Chiesa has served in numerous TPC committees and is now serving as a **TPC co-chair** for the **ACM CoNEXT 2021** conference (a major ACM conference on computer networks, GGS rank A) and the co-chair for the ACM SIGCOMM Posters and Demos 2021. He has been a TPC member in five occasions at IEEE Infocom (GGS rank **A⁺⁺**), five times at IEEE ICNP (GGS rank A), and once at ACM CoNEXT.

Part II: Education

- Roma Tre University**

○ *Ph.D. in Engineering (computer science and automation)*

Advisor: Prof. Giuseppe Di Battista

Degree Thesis: The Role of Routing Policies in the Internet: Stability, Security, and Load-Balancing

Rome, Italy

2011–2013
- Roma Tre University**

○ *M.sc. in Computer Engineering*

Thesis advisor: Prof. Giuseppe Di Battista

Thesis title : Inter-domain routing: relating the expressive power of router configuration languages to the complexity of stability-related decision problems

Grade: 110/110 with honors

Rome, Italy

2008–2010
- Roma Tre University**

○ *B.sc in Computer Engineering*

Thesis advisor: Prof. Paolo Atzeni

Thesis title: Gestione di modelli di siti web nell'ambito dello strumento MIDST

Grade: 110/110 with honors

Rome, Italy

2005–2008

Part III: Academic Appointments

- KTH Royal Institute of Technology**

○ *Assistant Professor (4-year tenure-track)*

Network Systems Lab, Dept. of Computer Science

Duties: My responsibilities include conducting high-level international research, guaranteeing a source of funding from national and international bodies, teaching and supervision of students in their educational programs, and participation in the hiring committees for doctoral and postdoctoral students

Stockholm, Sweden

January 2018–now
- Université catholique de Louvain**

○ *Postdoctoral researcher, “Endeavour” H2020 EU funded project*

Advisor: Prof. Marco Canini

Duties: Member of a Horizon 2020 EU-funded project about bringing novel networking paradigms into Internet routing. Responsibilities include conducting research within the project framework, managing the assigned deliverables with the role of editor, and support to teaching.

Louvain-la-neuve, Belgium

August 2015–December 2017
- Hebrew University of Jerusalem**

○ *Postdoctoral researcher, I-CORE “Fibonacci” fellowship*

Advisor: Prof. Michael Schapira

Duties: Conducting and disseminating research work. Producing short seminars within the area of network traffic optimization.

Jerusalem, Israel

March 2014–August 2015

- **ICSI/UC Berkeley** **Berkeley, CA, US**
Visiting Scholar *Aug 2013–Dec 2013*
Host: Prof. Scott Shenker
Duties: Leading a project on network robustness.
 - **Hebrew University of Jerusalem** **Jerusalem, Israel**
Visiting Ph.D. student *Oct 2012–Apr 2013*
Host: Prof. Michael Schapira
Duties: Leading a project on traffic engineering with OSPF/ECMP technologies.

Part IV: All publications

The 12 selected publications are reported in Part XIII.

International conference publications.....

Conference rankings based on the GII-GRIN-SCIE (GGG) ranking and CORE 2020 ranking available.

- [c1] H. Ghasemirahni, T. Barbette, G. Katsikas, A. Farshin, M. Girondi, A. Roozbeh, **M. Chiesa**, G. Q. Maguire Jr., D. Kostić. Packet Order Matters! Improving Application Performance by Deliberately Delaying Packets. In *USENIX Symposium on Networked Systems Design and Implementation (NSDI)*. 2022. (conference rank **A** on GGS and **B** on ERA).
- [c2] M. Girondi, **M. Chiesa**, T. Barbette. High-Speed Connection Tracking in Modern Servers. In *IEEE High Performance Switching and Routing (HPSR)*. 2021.
- [c3] G. Katsikas, T. Barbette, **M. Chiesa**, D. Kostic, G. Maguire Jr. What you need to know about (Smart) Network Interface Cards. Accepted at *Passive and Active Measurement Conference (PAM)*. 2021. Acceptance rate: 44%, (conference rank **A** on GGS and **B** on CORE).
- [c4] T. Barbette, C. Tang, H. Yao, D. Kostic, G. Maguire Jr., P. Papadimitratos, **M. Chiesa**. A High-Speed Load-Balancer Design with Guaranteed Per-Connection-Consistency In *USENIX Symposium on Networked Systems Design and Implementation (NSDI)*. 2020. Acceptance rate: 17%, (conference rank **A** on GGS and **B** on CORE).
- [c5] **M. Chiesa**, R. Sedar, G. Antichi, M. Borokhovich, A. Kamisiński, G. Nikolaidis, S. Schmid. PURR: A Primitive for Reconfigurable Fast Reroute. In *ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*. 2019. Acceptance rate: 16%, (conference rank **A** on both GGS and CORE).
- [c6] F. Németh, **M. Chiesa**, G. Rétvári. Normal Forms for Match-Action Programs. In *ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*. 2019. Acceptance rate: 16%, (conference rank **A** on both GGS and CORE).
- [c7] P. Marcos, **M. Chiesa**, L. Muller, P. Kathiravelu, C. Dietzel, M. Canini, M. Barcellos. Dynam-IX: a Dynamic Interconnection eXchange. In *ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*. 2018. Acceptance rate: 17%, (conference rank **A** on both GGS and CORE).
- [c8] P. Kathiravelu, **M. Chiesa**, P. de B. Marcos, M. Canini, L. Veiga. Moving Bits with a Fleet of Shared Virtual Routers. In *IEEE/IFIP Networking (Networking)*. 2018. Acceptance rate: 24% (conference rank **B** on GGS and **A** on CORE).

- [c9] **M. Chiesa**, D. Demmler, M. Canini, M. Schapira, T. Schneider. SIXPACK: Securing Internet eXchange Points Against Curious onlookers. In *ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*. 2017. Acceptance rate: 18%, (conference rank **A** on both GGS and CORE).
- [c10] T. D. Nguyen, **M. Chiesa**, M. Canini. Decentralized Fast Consistent Updates. In *ACM Symposium on SDN Research (SOSR)*, 2017. Acceptance rate: 23%. Leading new conference on SDN (not ranked in GGS and CORE).
- [c11] **M. Chiesa**, R. di Lallo, G. Lospoto, H. Mostafei, M. Rimondini, G. Di Battista. PrIXP: Preserving the Privacy of Routing Policies at Internet eXchange Points. In *IFIP/IEEE International Symposium on Integrated Network Management (IM)*, 2017, (conference rank **B** on GGS, not ranked on CORE).
- [c12] **M. Chiesa**, G. Retvari, M. Schapira. Lying Your Way to Better Traffic Engineering. In *ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*, 2016. Acceptance rate: 18%, (conference rank **A** on both GGS and CORE).
- [c13] **M. Chiesa**, I. Nikolaevskiy, S. Mitrovic, A. Gurtov, A. Mądry, A. Panda, M. Schapira, S. Shenker. The Quest for Resilient Static Forwarding Tables. In *IEEE International Conference on Computer Communications (INFOCOM)*, 2016. Acceptance rate: 18%, (conference rank **A⁺⁺** on GGS and **A^{*}** on CORE).
- [c14] **M. Chiesa**, I. Nikolaevskiy, S. Mitrovic, A. Gurtov, A. Mądry, M. Schapira, S. Shenker. On the Resiliency of Randomized Routing Against Multiple Edge Failures. In *International Colloquium on Automata, Languages, and Programming (ICALP)*, 2016. Acceptance rate: 28%, (conference rank **A** on both GGS and CORE).
- [c15] **M. Chiesa**, G. Kindler, M. Schapira. Traffic Engineering with Equal-Cost-Multipath: an Algorithmic Perspective. In *IEEE International Conference on Computer Communications (INFOCOM)*, 2014. Acceptance rate: 19%, (conference rank **A⁺⁺** on GGS and **A^{*}** on CORE).
- [c16] **M. Chiesa**, L. Cittadini, L. Vanbever, S. Vissicchio, G. Di Battista. Using Routers to Build Logic Circuits: How Powerful is BGP?. In *IEEE International Conference on Network Protocols (ICNP)*, 2013. Acceptance rate: 18%, (conference rank **A** on both GGS and CORE). **Best Paper Award. Applied Network Research Prize external nomination.**
- [c17] **M. Chiesa**, G. Lospoto, M. Rimondini, G. Di Battista. Intra-Domain Pathlet Routing. In *IEEE International Conference on Computer Communications and Networks (ICCCN)*, 2013. Acceptance rate: 30%, (conference rank **A-** in GGS and **A** in CORE).
- [c18] **M. Chiesa**, G. Di Battista, T. Erlebach, M. Patrignani. Computational Complexity of Traffic Hijacking under BGP and S-BGP. In *International Colloquium on Automata, Languages, and Programming (ICALP)*, 2012. Acceptance rate: 28%, (conference rank **A** on both GGS and CORE).
- [c19] **M. Chiesa**, L. Cittadini, G. Di Battista, S. Vissicchio. Local Transit Policies and the Complexity of BGP Stability Testing. In *IEEE International Conference on Computer Communications (INFOCOM)*, 2011. Acceptance rate: 15%, (conference rank **A⁺⁺** on GGS and **A^{*}** on CORE).

- [c20] A. Dainotti, C. Squarcella, E. Aben, K. C. Claffy, **M. Chiesa**, M. Russo, A. Pescapé. Analysis of Country-wide Internet Outages Caused by Censorship. In *ACM Internet Measurement Conference (IMC)*, 2011. Acceptance rate: 19%, (conference rank **A+** on GGS and **A** on CORE). **Applied Network Research Prize**.
- [c21] P. Angelini, T. Bruckdorfer, **M. Chiesa**, F. Frati, M. Kaufmann, C. Squarcella. On the Area Requirements of Euclidean Minimum Spanning Trees. In *Algorithms and Data Structures Symposium (WADS)*, 2011, (conference rank **B** on both GGS and CORE).

International journal publications.....

- [j22] T. Barbette, E. Wu, D. Kostic, G. Maguire Jr., P. Papadimitratos, **M. Chiesa**. Cheetah: A High-Speed Programmable Load-Balancer Framework with Guaranteed Per-Connection-Consistency. Accepted for publication in *IEEE/ACM Transactions on Networking (ToN)*. 2021. **Impact factor: 3.315**
- [j23] H. Mostafaei, D. Kumar, G. Lospoto, **M. Chiesa**, G. Di Battista. DeSI: A Decentralized Software-Defined Network Architecture for Internet eXchange Points. In *IEEE/ACM Transactions on Network Science and Engineering (TNSE)*. 2021. **Impact factor: 5.213**
- [j24] **M. Chiesa**, A. Kamisiński, J. Rak, G. Retvari, S. Schmid. A Survey of Fast Recovery Mechanisms in the Data Plane. Accepted to *IEEE Communications Surveys and Tutorials (COMST)*. 2021. **Impact factor: 23.7**
- [j25] **M. Chiesa**, R. Sedar, G. Antichi, M. Borokhovich, A. Kamisiński, G. Nikolaidis, S. Schmid. Fast ReRoute on Programmable Switches. In *IEEE/ACM Transactions on Networking (ToN)*. 2021. **Impact factor: 3.315**. Core ranking: **A***.
- [j26] W. Reda, K. L. Bogdanov, A. Milolidakis, H. Ghasemirahni, **M. Chiesa**, G. Q. Maguire Jr., D. Kostić. Path Persistence in the Cloud: An empirical study of the effects of Traffic Engineering in the AWS Network. In *ACM SIGCOMM Comput. Commun. Rev. (CCR)*. 2020. **Impact factor: 1.951**
- [j27] P. Marcos, **M. Chiesa**, C. Dietzel, M. Canini, M. Barcellos. A Survey on the Current Internet Interconnection Practices. In *ACM SIGCOMM Comput. Commun. Rev. (CCR)*. 2020. **Impact factor: 1.951**
- [j28] **M. Chiesa**, G. Retvari, M. Schapira. Oblivious Routing in IP Networks. In *IEEE/ACM Transactions on Networking (ToN)*. 2018. **Impact factor: 3.597**. Core ranking: **A***.
- [j29] G. Antichi, I. Castro, **M. Chiesa**, E. Fernandes, R. Lapeyrade, D. Kopp, J. Han, M. Bruyere, C. Dietzel, M. Gusat, A. W. Moore, P. Owezarski, S. Uhlig, M. Canini ENDEAVOUR: A Scalable SDN Architecture for Real-World IXPs. In *IEEE JSAC Special issue on Emerging Technologies in Software-driven Communication (JSAC)*, 2017. **Impact factor: 7.172**
- [j30] **M. Chiesa**, I. Nikolaevskiy, S. Mitrovic, A. Gurtov, A. Mądry, M. Schapira, S. Shenker. On the Resiliency of Static Forwarding Tables. In *IEEE/ACM Transactions on Networking (ToN)*, 2017. **Impact factor: 3.11**. Core ranking: **A***.

- [j31] **M. Chiesa**, G. Kindler, M. Schapira. Traffic engineering with Equal-Cost-Multipath: An algorithmic perspective. In *IEEE/ACM Transactions on Networking (ToN)*, 2017. **Impact factor: 3.11**. Core ranking: **A***. Awarded the **IEEE Communications Society William R. Bennett Prize**.
- [j32] **M. Chiesa**, C. Dietzel, G. Antichi, M. Bruyere, I. Castro, M. Gusat, T. King, A. W. Moore, T. D. Nguyen, P. Owezarski, S. Uhlig, M. Canini. Inter-domain Networking Innovation on Steroids: Empowering IXPs with SDN Capabilities. In *IEEE Communications Magazine special issue on SDN Use Cases for Service Provider Networks (ComMag)*, Oct. 2016. **Impact factor: 10.435**
- [j33] **M. Chiesa**, G. Di Battista, T. Erlebach, M. Patrignani. Computational Complexity of Traffic Hijacking under BGP and S-BGP. In *Theoretical Computer Science (TCS)*. 2015. **Impact factor: 0.643**. Core ranking: **A**.
- [j34] A. Dainotti, C. Squarcella, E. Aben, K. C. Claffy, **M. Chiesa**, M. Russo, A. Pescapé. Analysis of Country-wide Internet Outages Caused by Censorship. In *IEEE/ACM Transactions on Networking (ToN)*, 22(6):1964-1977. 2014. **Impact factor: 1.811**. Core ranking: **A***.
- [j35] **M. Chiesa**, G. Lospoto, M. Rimondini, G. Di Battista. Intra-Domain Routing with Pathlets. In *Computer Communications (COMCOM)*, 46:76-86. 2014. **Impact factor: 1.695**. Core ranking: **C**.
- [j36] P. Angelini, T. Bruckdorfer, **M. Chiesa**, F. Frati, M. Kaufmann, C. Squarcella. On the Area Requirements of Euclidean Minimum Spanning Trees. In *Computational Geometry: Theory and Applications (CG)*, 47(2):200-213. 2014. Special Issue on Selected Papers from WADS '11. **Impact factor: 0.480**. Core ranking: **B**.

Workshop papers, extended abstracts, demo, and posters.....

- [w37] T. Wang, S. Ferlin, **M. Chiesa**. Predicting CPU Usage for Proactive Autoscaling. In the *Workshop on Machine Learning and Systems (EuroMLSys)*, 2020.
- [w38] T. Barbette, **M. Chiesa**, G. Q. Maguire Jr., D. Kostic. Poster: Stateless CPU-Aware Datacenter Load-Balancing. In the *ACM Conference on emerging Networking EXperiments and Technologies Posters (CoNEXT Posters)*, 2020.
- [w39] A. Dethise, **M. Chiesa**, M. Canini. Poster: Prelude: Ensuring Inter-Domain Loop-Freedom in SDN-Enabled Networks. In the *Asia-Pacific Workshop on Networking (APNet)*, 2018.
- [w40] P. Marcos, **M. Chiesa**, L. Muller, P. Kathiravelu, C. Dietzel, M. Canini, M. Barcellos.. Poster: Dynam-IX: a Dynamic Interconnection eXchange. In *Applied Networking Research Workshop (ANRW)*, 2018.
- [w41] Y. Alowayed, M. Canini, P. Marcos, **M. Chiesa**, M. Barcellos. Poster: Picking a Partner: A Fair Blockchain Based Scoring Protocol for Autonomous Systems. In *Applied Networking Research Workshop (ANRW)*, 2018.
- [w42] R. Sedar, M. Borokhovich, **M. Chiesa**, G. Antichi, S. Schmid. Exploring Fast Reroute Mechanisms in P4. In *SIGCOMM Workshop on Networking for Emerging Applications and Technologies (NEAT)*. 2018. Workshop paper.

- [w43] K-T. Foerster, M. Parham, **M. Chiesa**, S. Schmid. TI-MFA: Keep Calm and Reroute Segments Fast In *IEEE Global Internet Symposium (GI)*, 2018
- [w44] A. Dethise, **M. Chiesa**, M. Canini. Poster: Privacy-Preserving Detection of Inter-Domain SDN Rules Overlaps. In (**SIGCOMM**), 2017
- [w45] C. Dietzel, G. Antichi, I. Castro, E. Fernandes, **M. Chiesa**, D. Kopp. Demo: SDN-enabled Traffic Engineering and Advanced Blackholing at IXPs. In *Symposium on SDN Research (SOSR)*, 2017
- [w46] T. D. Nguyen, **M. Chiesa**, M. Canini. Towards Decentralized Fast Consistent Updates. In *Applied Networking Research Workshop (ANRW)*, 2016. Workshop paper.
- [w47] **M. Chiesa**, D. Demmler, M. Canini, M. Schapira, T. Schneider. Poster: Towards Securing Internet eXchange Points Against Curious onlookers. In *Applied Networking Research Workshop (ANRW)*, 2016.

Patents.....

- [p48] A. Roozbeh, A. Farshin, **M. Chiesa**, F. Verdi. System and Method for Accurate Traffic Monitoring on Multi-Pipeline Switches. Filed provisional with the USPTO (Application No. NUMBER) in October 2021.
- [p49] T. Wang, S. Ferlin-Reiter, **M. Chiesa**, E. L. Medeiros. Network node and a method in a containerized applications network. Filed provisional with the USPTO (Application No. 63/179,631) in April 2021.

Part V: Teaching Experience

- Course responsible, examiner**

○ *IS1500: Computer Organization and Components*

Credits: 9 hp, bachelor level

Teaching format: frontal lectures, video lectures, labs, seminars, exercises, and group projects.

Examination format: home assignments, written exam, oral exam, labs, and group project

Years: 2021 (260 students)

Role: course responsible, examiner for some parts of the course

Course evaluation: student survey, intermediate and final meeting, course analysis

KTH Royal Institute of Technology

Period I-II, 2021 – current
- Course responsible, examiner**

○ *IK2217: Advanced Internetworking II*

Credits: 7.5 hp, master level

Teaching format: frontal lectures, video lectures, quizzes, labs, and group projects

Examination format: home assignments, written exam, oral exam, lab and group project

Years: 2018 (14 students), 2019 (28 students), 2020 (13 students), 2021 (18 students).

Role: course responsible, teacher (16h frontal lectures, 12 hours labs), examiner since 2019

Course evaluation: student survey, intermediate and final meeting, course analysis

KTH Royal Institute of Technology

Period III, 2019 – current

- **Teacher** **KTH Royal Institute of Technology**
IK2220: Software Defined Networking *Period IV, 2018 – current*
Credits: 7.5 hp, master level
Teaching format: frontal lectures, video lectures, quizzes, and group projects
Examination format: home assignments, written exam, and group project
Years: 2018 (17 students), 2019 (22 students), 2020 (27 students), 2021 (21 students).
Role: teacher (8h frontal lectures), examiner
Course evaluation: student survey, final student meeting
- **Teacher** **KTH Royal Institute of Technology**
IK2215: Advanced Internetworking I *Period I, 2018 – current*
7.5 hp, master level
Teaching format: frontal lectures, video lectures, quizzes, labs, and group projects
Examination format: home assignments, written exam, labs, and group project
Years: 2018 (61 students), 2019 (59 students), 2020 (60 students)
Role: teacher (6h frontal lectures), examiner
Course evaluation: student survey, final student meeting
- **Examiner for master degree project** **KTH Royal Institute of Technology**
2021: 9 students
- **Teacher** **KTH Royal Institute of Technology**
IK2217: Advanced Internetworking II *Period III, 2018*
- **Master thesis reader** **Université catholique de Louvain**
Reader for one master thesis *Spring 2017*
- **Teaching Assistant** **Université catholique de Louvain**
INGI2142 Computer networks: configuration and management *Spring 2017*
- **Guest lecture** **Université catholique de Louvain**
INGI2347 Computer System Security *Spring 2016*
- **INGI2349 Network and Communication Seminar** **Université catholique de Louvain**
Graded students oral presentations *Autumn 2015*
- **Advanced seminars on Oblivious Routing** **Hebrew University of Jerusalem**
Designed and taught a seminar course for third-cycle students *Spring 2015*
- **Thesis reviewer** **Roma Tre University**
Read, reviewed, and graded 11 external B.sc./M.sc. thesis *2011–2013*

Part VI: Supervision Experience

- **Supervision of doctoral students** **KTH Royal Institute of Technology**
 - 2020 – current: Giacomo Verardo (with Prof. Dejan Kostic) 2019 – current
 - 2020 – current: Massimo Girondi (with Prof. Dejan Kostic)
 - 2019 – current: Alexandros Milolidakis (with Prof. Dejan Kostic)
 - 2019 – current: Hamid Ghasemirahni (with Prof. Dejan Kostic)
 - **Supervision of master students** **KTH Royal Institute of Technology**
 - 2021: 4 students
 - 2020: 5 students
 - 2019: 3 students
 - 2018: 1 student
 - **Supervision of postdoctoral students** **KTH Royal Institute of Technology**
 - 2021: Fabio Verdi
 - **Supervision of bachelor degree project** **KTH Royal Institute of Technology**
 - 2021: one student
 - **Student supervision** **Université catholique de Louvain**
 - Informal advisor to two Ph.D. students Spring 2017
 - **Student supervision** **Université catholique de Louvain**
 - Supervisor to one master student Spring 2017
 - **Supervision of bachelor and master students** **Roma Tre University**
 - Supervised two theses 2012–2013
 - Published one conference and one journal paper

Part VII: Higher education pedagogics courses

- **Doctoral Supervision**
 - 3.0 hp LH207V. Taken at KTH Royal Institute of Technology Fall 2018
- **Supervision and Assessment of Degree Project Work in 1st and 2nd Cycle**
 - 3.0 hp LH219V. Taken at KTH Royal Institute of Technology Fall 2019
- **Teaching and Learning in Higher Education**
 - 7.5 hp LH231V. Taken at KTH Royal Institute of Technology Spring 2020
- **Develop the Learning by Using Grading Criteria**
 - 1.5 hp LH216V. Taken at KTH Royal Institute of Technology Spring 2020

Part VIII: Awards

- **IEEE Communications Society William R. Bennett Prize 2020**
 - For our paper “Traffic Engineering with ECMP: An Algorithmic perspective”
 - “Best publication of an original paper published in the IEEE/ACM Transactions on Networking or the IEEE Transactions on Network and Service Management in the previous three calendar years”
- **2 x Distinguished TPC member**
 - IEEE INFOCOM 2019 and IEEE INFOCOM 2020
 - “This distinction is awarded based upon ratings by peer TPC members, fairness in review scores, and promptness in meeting various deadlines during the review process”.

- **Facebook Networking Systems Research Award 2019, runner-up**
- *"A High-Speed Stateless Load-Balancer with Perfect Connection-Affinity"*
"The scientific work that underpins the project was rated as internationally excellent by the panel"
- **Best Paper**
- *IEEE ICNP 2013*
- **IETF Applied Research Networking Prize 2012**
- *For our IMC paper "Analysis of Country-wide Internet Outages Caused by Censorship"*
- **IETF Applied Research Networking Prize 2013 external nomination**
- *For our ICNP paper "Using Routers to Build Logic Circuits: How Powerful is BGP?"*
- **Travel Grants**
- *INFOCOM 2011, ICNP 2013*
- **National Mathematics Competitions 2005**
- *4th placement at the Italian Kangourou mathematics competition (Mirabilandia, Italy)*
Honorable mention at the Italian championship in mathematics (Cesenatico, Italy)
7th place at the regional mathematics competition within the area of Rome (Italy). Over 100,000 students.

Part IX: Professional Service and Society Memberships

Rankings based on GGS.

- **TPC co-chair**
- *ACM CoNEXT 2021 (ranking **A**)*
ACM SIGCOMM Posters & Demos 2021
- **Technical Program Committee**
- *Reviewed 189 conference/workshop/extended abstract papers.*
*IEEE INFOCOM 2022 (ranking **A⁺⁺**)*
*IEEE INFOCOM 2021 (ranking **A⁺⁺**)*
*IEEE ICNP 2021 (ranking **A**)*
PAM 2021
APNet 2021
EuroP4 2021
*IEEE INFOCOM 2020 (ranking **A⁺⁺**)*
*ACM CoNEXT 2020 (ranking **A**)*
*IEEE ICNP 2020 (ranking **A**)*
APNet 2020
IEEE Global Internet Symposium 2020
ACM SIGCOMM Posters and Demos 2020
*IEEE INFOCOM 2019 (ranking **A⁺⁺**)*
*IEEE ICNP 2019 (ranking **A**)*
IEEE HPSR 2019
APNet 2019
*IEEE/ACM CCGrid 2019 (ranking **A**)*
ACM SIGCOMM Posters and Demos 2019
ACM CoNEXT Students Workshop 2019
*IEEE INFOCOM 2018 (ranking **A⁺⁺**)*
*IEEE ICNP 2018 (ranking **A**)*

ACM SOSR 2018
IEEE HPSR 2018
IEEE/ACM CCGrid 2018 (ranking **A**)
IEEE LANMAN 2018
APNet 2018
ACM EuroSys Doctoral Workshop 2018
ACM SOSR Posters and Demos 2018
IEEE ICNP 2017 (ranking **A**)
ITC 2017
IEEE SWFAN 2017

Organizing co-chair

- 2020: IEEE ICNP Workshop
- 2019: IEEE ICNP Publicity chair
- 2018: ACM SIGCOMM Student Research Competition

Session chair invitations

- 2021: IEEE INFOCOM, IEEE ICNP
- 2020: IEEE INFOCOM, ACM CoNEXT, IEEE ICNP
- 2019: IEEE INFOCOM, IEEE ICNP
- 2018: IEEE ICNP, ACM SOSR, IEEE INFOCOM, IEEE LANMAN
- 2017: ACM CoNEXT, IEEE ICNP

Topic Preview Invitation

- 2021: "Distributed Systems and Network Support" session at SIGCOMM (declined)
- 2019: "New Control Plane Operations" session at SIGCOMM (declined for parental reasons)
- 2018: "Routing" session at SIGCOMM

Invited external reviewer

- Reviewed 32 journals and 9 conference papers as external reviewer
- ACM CoNEXT 2018
- Computer Networks 2018
- IEEE/ACM Transactions on Networking (ToN) 2016–current
- IEEE Transactions on Mobile Computing (TMC) 2017–current
- Transactions on IEEE Network and Service Management (TNSM) 2016–current
- Transactions on Signal Processing (TSP) 2020–current
- Parallel Processing Letters 2017–2018
- IEEE INFOCOM 2016–2017
- ACM Computer Communication Review 2017, 2021
- ACM SOSR 2017
- IEEE/IEEE/IFIP Networking 2017
- ICALP 2016
- Symposium on Experimental Algorithms (SEA) 2013
- Graph Drawing 2012

Ph.D. Thesis Committee

- Massimo Candela, *Università di Pisa, Expected defense: Spring 2021*
- Sebastiano Miano, *Politecnico di Torino, Spring 2020*
- Doron Zarchy, *Hebrew University of Jerusalem, Israel, Spring 2019*
- Habib Mostafei, *Roma Tre University, Italy, Spring 2019*
- Németh Krisztián, *Budapest University of Technology and Economics, Hungary, Spring 2018*
- midterm: Rodrigo Ruas Oliveira, *Universidade Federal Do Rio Grande do Sul, Brazil, Spring 2018*

National project external reviewer

- Israel Science Foundation (ISF) 2018, 2021

Award committees

- 2019: ACM APNet best paper panel member

Journal panel

- JSAC on SDN scalability, 2018

Society memberships

- IEEE member since 2011
- ACM member since 2016
- CASTOR software center member
- Digital Futures member of the Cooperate workgroup

Hiring committee

- Member of the hiring panel for doctoral students in the NSLab group at KTH since 2018
- Member of the hiring panel for postdocs within Digital Futures

Part X: Funding Grants

- | | |
|--|------------------------------|
| <ul style="list-style-type: none"> Self-adapting disaggregated cloud infrastructures | 2021 – 2026 |
| <ul style="list-style-type: none"> Funded by WASP (Ericsson AB covers remaining PhD costs) | 2.4M SEK \approx 240K EUR |
| Role: PI. Partner: Ericsson
Total funding: one full PhD student | |
| <ul style="list-style-type: none"> Enabling Machine Learning for Network Cybersecurity | 2020 – 2022 |
| <ul style="list-style-type: none"> Funded by "Digital Futures" within the "Research Pairs" programme | 1.75M SEK \approx 175K EUR |
| Role: PI. Partner: RISE Total funding: 2M SEK | |
| <ul style="list-style-type: none"> SE-CAID: Swedish Communications and AI research Data lab | 2019 – 2021 |
| <ul style="list-style-type: none"> Data lab and data factory as national resource 2020 | 500K SEK \approx 50K EUR |
| Role: Co-PI. Partners: RISE, Lund University, Ericsson, Stokab Total funding: 4.5M SEK | |
| <ul style="list-style-type: none"> Design of an In-network Load-aware FRR mechanism | 2020 – 2021 |
| <ul style="list-style-type: none"> Funded by "Chamada de Projetos CNPq-CISB project". | 320K SEK \approx 32K EUR |
| Role: Hosting supervisor.
One year postdoc scholarship assigned to Fabio Verdi working in my group
Total funding: 320K SEK | |

Part XI: Research Activities

In this section, references are reported at the end of the section.

Context. It is undeniable that today's society is highly dependent on the Internet. A key principle in the success of today's Internet is the simplicity of its underlying long-standing protocols. Through the same set of minimal, well-defined, and modular network interfaces, organizations have built, interconnected, and evolved their networks in great autonomy, for decades. Unfortunately, as networks have become larger and more blended into society, it now appears evident that there exists an increasing friction between the assumptions made more than three decades ago and the unprecedented scale at which today's networks operate (both in terms of resilience and performance). This situation has resulted in a variety of alarming issues.

Issue #1: Vulnerable networks. Today's network protocols for exchanging information among networks, known as routing protocols, have no in-built security [1]. Consequently, small networks have repeatedly disrupted all communication traffic towards trillion-dollars companies and government institutions with extreme simplicity. These attacks, known as routing hijacks, have plagued the Internet for decades [2], affecting financial institutions (e.g., Visa, crypto-currencies), large tech companies, critical components of the Internet (e.g., DNS), mobile networks, surveillance of people, certificate authorities. A second type of critical attacks are Distributed Denial-of-Service (DDoS) attacks [3], which disrupt a service by generating an unbearable number of requests. DDoS attacks are an alarmingly increasing threat to the Internet, targeting hospitals, banking, and e-commerce applications [3,4].

Issue #2: Increased network inefficiencies. Networking speeds have been doubling every two years in the last decade while CPU core speeds have remained unchanged. Recent findings have shown that traditional network protocols would today consume excessive amounts of CPU resources to process data packets [5]. Moreover, our recent results show that today's goals of computer architecture community (which aims to make efficient utilization of caches by processing packets in bursts) are antithetical to the emerging goals of the networking community (which aims at minimizing congestion in the network by spreading packets apart). Reconciling these conflicting goals requires to revise how network protocols interact with the end hosts. Moreover, Internet networks are forecasted to consume up to 20% of the global electricity by 2030 [6]. To reduce energy usage, operators need to carefully optimize their networks. Yet, none of today's tools for transforming high-level network specifications into device configurations takes into account how the performance of a device changes depending on its state and traffic patterns, which leads to inefficiencies.

My planned research activities. My ultimate goal is to build more resilient and efficient networks that mitigate the above largely unsolved problems. The key idea is to embrace emerging trends in the networking community towards more programmable networks (as opposed to black-box networks). My current and future research builds upon recent methodological and technological advancements in the areas of programmable networks, high-speed packet processing, and graph-based machine-learning. The emerging programmability of today's high-speed packet processing systems has opened the doors to an unprecedented level of control in the network, which makes my future research vision realizable in practice. More concretely, I plan to pursue my research agenda in the following four timely areas:

#1: Resilient routing protocols. In my research, I intend to first investigate how sophisticated Internet attacks that are completely invisible to today's monitoring systems propagate over the Internet and how these can be used to damage organizations and users, (e.g., by simply intercepting traffic or stealing HTTP certificates). I then plan to explore the intuition that attacks inevitably change the characteristics of the affected traffic and these attacks can potentially be identified directly in the network with support from the end points of the communication. My goal is to devise novel techniques for detecting and mitigating such attacks directly in the network and with minimal support from other networks, thus overcoming one of the main barriers towards adoption of routing security protocols.

#2: Performance-aware network protocols. The imminent slow-down in the Moore's law (i.e., reduced economic advantages in building more efficient chips) has highlighted the limitations of the protocols that have governed the Internet for decades. In my research, I challenge the principle of simplicity that have permeated the Internet over the decades and I argue that the time is ripe for network protocols to support more advanced interfaces in a programmatic manner without sacrificing their evolvability. I envision increasing the coupling between the different networking layers by leveraging explicit information provided by the communication endpoints directly in the network. This information can be used to both improve resource utilization and overcome the emerging conflicting goals between network protocols and computer architectures. This would result into developing next-generation network protocols that are well aligned with the emerging trends in networking and allows operators to build more resilient and efficient networks without hindering their flexibility in embracing new technologies. More tightly coupled systems have the potential to increase the efficiency by a factor of 100x compared to uncoupled ones [8].

#3: Performance-aware network synthesis. Network synthesis is a recent methodology adopted by large-scale networks that takes as input a high-level specification of the network and it compiles it down into per-device configurations [9]. The goal is to produce correct-by-design configurations that guarantee functional requirements such as reachability under failures. None of the existing works can however guarantee non-functional performance requirements as synthesizer tools lack low-level details about the network devices. A critical hindrance towards performance-aware network synthesis is the difficulty for the compiler to predict the performance of a specific configuration of the devices and traffic inputs. My future research looks at how to design network synthesis tools that produce network configurations with performance guarantee under certain and uncertain scenarios (e.g., a link failure). I will focus specifically on how to control high-speed data processing accelerators for ML, 5G/6G, and beyond with software principles.

#4: Machine learning for high-speed network traffic analysis. Thwarting network cyberattacks such as distributed denial of service is a complex problem. Traditional network technologies are not designed to learn how to distinguish legitimate traffic from malicious one but rather to forward traffic towards their destinations at the highest possible speed. To tackle cyber-attacks, today's best-practices require operators to move overwhelmingly large amounts of traffic data from network devices towards externally dedicated computational units, which is expensive to perform in practice. Machine Learning (ML) is a widely adopted approach to learn how to classify large amounts of data. However, existing ML approaches to counteract network cybersecurity threats have so far been hindered by four unique challenges of the network domain: i) the inherent lack of data persistence as traffic is constantly moving towards their destinations, ii) the renowned lack of experts on both ML and network cybersecurity, iii) network technologies that are ill-suited for extracting fine-grained network information from high-speed networking devices, and iv) the lack of publicly available

network data sets to train ML models. In my current and future research, I envision overcoming the aforementioned challenges by designing, implementing, and deploying an ML framework tailored for network cybersecurity applications by relying on the emerging high-speed programmable network devices. We have currently received funding from both Vinnova (to build an ML datalab where network traces can be stored, streamed, and analyzed) as well as Digital Futures (to study how to run preliminary computation directly in the network and how to feed ML- dedicated nodes with information from the network).

References: [1] Y. Rekhter et al., "A Border Gateway Protocol 4 (BGP-4)," RFC 4271, Jan 2006. [2] Noction, "BGP Hijacking overview. Routing incidents prevention and defense mechanisms". [3] Kaspersky Lab, "Denial of Service: How Businesses Evaluate the Threat of DDoS Attacks", IT Security Risks Special Report Series, 20187. [4] Archyde, "Hospital systems Paris inaccessible for hours on end due to DDOS attack", 2020. [5] Y. Zhu et al., "Congestion Control for Large-Scale RDMA Deployments", In SIGCOMM'15. [6] N. Jones, "How to stop data centres from gobbling up the world's electricity" Nature, 2018. [7] ZdNet "Microsoft: We're on pace to build 50 to 100 new datacenters each year". [8] A. Vahdat, "Coming of Age in the Fifth Epoch of Distributed Computing: The Power of Sustained Exponential Growth" SIGCOMM Keynote 2020 [9] N. Raje, "Building and operating reliable hyper-scale networks" Conext Keynote, 2020.

Collaboration with the society and the business world

I have established international collaborations with researchers and practitioners from the industry:

- Ericsson invited me twice to present our recent work, is a partner in our Vinnova project, have co-authored a paper, submitted two provisional patent applications, and supervised master students.
- Saab gave a guest lecture in my main course, has funded a postdoc in my group, and provided us with a 6.4 terabits per second programmable Tofino switch.
- Nvidia invited us to give a talk about our recent work on benchmarking network devices.
- Intel invited me to give a talk about our recent work on datacenter load balancing.
- DECIX, the third largest Internet eXchange Point (IXP) worldwide has supported my Vinnova project on building a datalab for Machine Learning.
- AMSIX, the 4th largest IXP, has invited me to talk about my work on secure routing services.
- Scalout Systems, a Stockholm-based startup, has shown great interest in our current Vinnova project and has discussed ways to integrate their products within our platform. They also supported a recent grant proposal of ~3M EUR.
- NTT has collaborated with us on an internal master thesis at KTH on securing Internet routing.
- Amazon AWS has invited us to present our work on benchmarking their internal network.
- RIPE, the largest community of network operators in Europe, has invited me twice to present our findings to the broader industrial community.

Part XII: Summary of Scientific Achievements

Summary of the candidate's bibliometric values (based on SCOPUS and Web of Science):

- Total number of papers: **44** published + **1** accepted for publication (only international venues)
- Hirsch index: **14** (Google scholar)
- Hirsch index: **11** (Scopus)
- Total number of citations: **842** (Google scholar)
- Total number of citations: **457** (Scopus)
- Average number of citations per publication: **10.3**
- Total impact factor: **71.5**
- Average impact factor per journal paper: **5.1**

Part XIII: Selected Publications for Individual Evaluation

It follows a selection of the 12 most relevant works from the candidate. Conference rankings based on GII-GRIN-SCIE (GGS). Journal rankings based on CORE2020. For each journal paper, I also report the Google scholar citations and the number of citations for the preliminary version of the journal paper that has been previously accepted to a conference. Many journal papers in our field are extensions of the conference papers. The number of citations has been checked on 12/10/2021.

- [1] H. Ghasemirahni, T. Barbette, G. Katsikas, A. Farshin, M. Girondi, A. Roozbeh, **M. Chiesa**, G. Q. Maguire Jr., D. Kostić

Packet Order Matters! Improving Application Performance by Deliberately Delaying Packets
Accepted to *USENIX Networked Systems Design and Implementation (NSDI)*, 2022

Acceptance rate: **26%**

Conference ranking: **A**

Google Scholar citations: **0**

Relevance: NSDI is the top network system conference with work from top universities and companies, e.g., Google, Facebook. This is one of the only two papers accepted with all co-authors from the EU (only 4 papers with authors from EU out of 28 papers). This is a massive work from our research group that unveiled the existence of an emerging friction between recent networking trends, which advocate that congestion control mechanisms pace packets, i.e., spread packets in a flow apart from each other as much as possible to minimize the risk of congestion in the network, and the desire to process incoming packets in memory caches to the greatest extent possible (due to trends in computer architecture). For the paper submission, I supervised the doctoral students and the rest of the team (each working on a different part of the system). We submitted this work to USENIX NSDI 2021 (flagship conference). After receiving a one-shot revision (this is an excellent result at NSDI), we have resubmitted our revised paper at NSDI 2022, where it has now been accepted.

- [2] T. Barbette, E. Wu, D. Kostic, G. Maguire Jr., P. Papadimitratos, **M. Chiesa**
A High-Speed Programmable Load-Balancer Framework with Guaranteed Per-Connection-Consistency
In *IEEE/ACM Transactions on Networking (ToN)*. 2021.

Impact factor: **3.315**

DOI: 10.1109/TNET.2021.3113370

Preliminary paper: USENIX NSDI (rank **A**, acceptance rate: **17%**)

Conference ranking: **A**

Scopus citations: **9**, Google Scholar citations: **18**

Relevance: This paper has originally appeared at NSDI 2020, the top network system conference. This was the only accepted paper with all co-authors from the EU. This work tackles a decade long problem on how to load balance user-facing traffic in a datacenter network. The state-of-the-art work encompasses real-world load balancers from the largest networking-savvy players in the networking field (i.e., Google Maglev (NSDI'16), Facebook Katran, Microsoft Ananta (SIGCOMM'13), Fastly Faild (NSDI'18) as well as academic efforts such as Beamer (NSDI'18) and SilkRoad (SIGCOMM'18). Our work takes a radically new approach to support uniform load balancing while being scalable, memory efficient, resilient to clogging attacks, and fast at processing packets. We implemented our design on both commodity servers (i.e., x86 architecture) and high-speed programmable switches (i.e., terabit-speed Intel Tofino). We presented our work at both Intel and Ericsson. The work has also been recognized with the 2019 **Facebook Networking Systems Research award runner-up**.

- [3] **M. Chiesa**, A. Kamisiński, J. Rak, G. Retvari, S. Schmid
A Survey of Fast Recovery Mechanisms in the Data Plane
Accepted to *IEEE Communications Surveys and Tutorials (COMST)*, 2021
Impact factor: **23.7**
DOI: 10.1109/COMST.2021.3063980
Scopus citations: **1**
Google Scholar citations: **11**
Relevance: This paper provides a broad survey of one of the main areas of my expertise: network robustness. Together with four collaborators, we reviewed the enormous body of literature on network fast failover mechanisms for a variety of technologies that span over 40 years of history. Based on this review, we distilled the main principles, mechanisms, and algorithms that have been widely applied across all the analysed technologies. This work has been published at the most prestigious survey journal in my field.
- [4] **M. Chiesa**, R. Sedar, G. Antichi, M. Borokhovich, A. Kamisiński, G. Nikolaidis, S. Schmid
Fast ReRoute on Programmable Switches
In *IEEE/ACM Transactions on Networking (ToN)*, 2021
Impact factor: **3.315**
Core ranking: **A***
DOI: 10.1109/TNET.2020.3045293
Scopus and Google scholar citations: **1**
Preliminary paper: ACM CoNEXT 2019 (rank **A**)
Scopus citations of preliminary paper: **10**
Google scholar citations of preliminary paper (ACM CoNEXT 2019, rank **A**): **15**
Relevance: This paper tackles an emerging problem of today's high-speed network devices: "How to quickly activate a backup state in a network?". In this work, we unveil an intriguing connection between a well-known network robustness problem and classic "string theory" (*i.e.*, stringology). Our work has been awarded three reproducibility badges at ACM CoNEXT.
- [5] **M. Chiesa**, G. Retvari, M. Schapira
Oblivious Routing in IP Networks
In *IEEE/ACM Transactions on Networking (ToN)*, 2018
Impact factor: **3.597**
Core ranking: **A***
DOI: 10.1109/TNET.2018.2832020
Scopus citations: **4**
Google Scholar citations: **5**
Preliminary paper: ACM CoNEXT 2016 (rank **A**)
Scopus citations of preliminary paper: **20**
Google scholar citations of preliminary paper: **32**
Relevance: This work tackles the problem of forwarding traffic in a network in the presence of uncertain events such as sudden changes in the traffic patterns. Our work shows the surprising result that today's networks do not need the programmability of SDN networks to achieve good resilience to changes in the traffic demands. We significantly reduce congestion in the network by carefully computing the routing schemes based on adapted geometric programming tools.

- [6] P. Marcos, **M. Chiesa**, L. Muller, P. Kathiravelu, C. Dietzel, M. Canini, M. Barcellos
Dynam-IX: a Dynamic Interconnection eXchange
In *ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*, 2018
DOI: 10.1145/3281411.3281419
Acceptance rate: **17%**
Conference ranking: **A**
Scopus citations: **5**
Google Scholar citations: **9**
Relevance: This work tackles the problem of facilitating the establishment of interconnection agreements on the Internet. We propose Dynam-IX, a framework that allows operators to build trust cooperatively and implement traffic engineering policies to exploit the existing rich interconnection opportunities. This work has gained significant interests from the operational networking community and I presented it at the RIPE meeting, the main event for network operators in the European region.
- [7] **M. Chiesa**, G. Kindler, M. Schapira
Traffic engineering with Equal-Cost-Multipath: An algorithmic perspective
In *IEEE/ACM Transactions on Networking (ToN)*, 2017
Impact factor: **3.11**
Core ranking: **A***
DOI: 10.1109/TNET.2016.2614247
Scopus citations: **49**
Preliminary paper: IEEE Infocom 2014 (rank **A++**)
Scopus citations of preliminary paper: **38**
Google scholar citations of journal and preliminary paper: **139**
Relevance: This work tackles the well-known problem in networking of optimizing the flow of traffic when the operator can split these between multiple paths using *rational* splitting ratios. Our surprising result shows that optimizing the flow of traffic within any constant approximation factor cannot be done in polynomial time. We also show positive results for different types of network topologies, such as datacenter Clos networks. I started this work when visiting Prof. Michael Schapira as a doctoral student and it is part of my Ph.D. dissertation. The results of these paper have been cited over hundred times and the work has recently been awarded the 2020 **IEEE Communications Society William R. Bennett Prize**, a prize that is given to the best paper published at the IEEE/ACM Transactions on Networking journal (rank **A***) in the last three calendar years, *i.e.*, 2017-2019.
- [8] **M. Chiesa**, D. Demmler, M. Canini, M. Schapira, T. Schneider
SIXPACK: Securing Internet eXchange Points Against Curious onlookers
In *ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*, 2017
DOI: 10.1145/3143361.3143362
Acceptance rate: **18%**
Conference ranking: **A**
Scopus citations: **14**
Google Scholar citations: **21**
Relevance: This work has been a predecessor of the above CoNEXT paper. Internet Service providers struggle to exchange routing information among each other because of the large amount

of routing information traversing the main crossroads of Internet traffic, *i.e.*, the Internet eXchange Points (IXPs). In this work, we propose using privacy-preserving techniques to facilitate the exchange of routes among different networks. The design of the privacy-preserving functionalities is non-trivial as it requires to balance the need for confidentiality requirements with the computational complexity overhead of the existing privacy-preserving primitives. Our design shows that a careful design based on two-party secure-multiparty computation can be used as a viable technique for efficiently dispatching Internet routes in a privacy-preserving manner. This work received interest from the industry as evidenced by the two talks that I gave at AMSIX and DECIX, two of the largests IXPs worldwide.

- [9] T. D. Nguyen, **M. Chiesa**, M. Canini
Decentralized Fast Consistent Updates
In *ACM Symposium on SDN Research (SOSR)*, 2017
Acceptance rate: **23%**
DOI: 10.1145/3050220.3050224
Conference ranking: one of the new leading conferences on SDN not ranked in GGS/CORE.
Scopus citations: **25**
Google Scholar citations: **34**
Relevance: This work investigates the problem of speeding up the reaction time of a network to link and node failures by bringing the logic to update the network from a centralized controller to the network devices themselves. This radically new idea was one of the first which advocated for a clever separation between the operations that should be performed in a centralized manner and those that should be performed in a distributed manner directly in the network at very high-speed.
- [10] **M. Chiesa**, I. Nikolaevskiy, S. Mitrovic, A. Gurtov, A. Mądry, M. Schapira, S. Shenker
On the Resiliency of Static Forwarding Tables
In *IEEE/ACM Transactions on Networking (ToN)*, 2017
Impact factor: **3.11**
Core ranking: **A***
DOI: 10.1109/TNET.2016.2619398
Scopus citations: **23**
Google Scholar citations: **32**
Preliminary papers: IEEE Infocom 2016 (rank **A++**), ICALP (rank **A**)
Scopus citations of preliminary paper: **37**
Google scholar citations of preliminary paper: **54**
Relevance: This has been one of my most successful works that I led as a first-author. The problem tackled here relates to the problem of quickly rerouting traffic in a network in the event of a failure event. To support the emerging requirements of highly available applications, we focus on mechanisms that do not require any interaction among the switches. The backup plans are pre-computed in the network devices and can be activated at the highest possible speed by the network devices (without any bottleneck from traditional slower centralized or distributed approaches). The key idea in this paper is to decompose the network into a multitude of *arc-disjoint spanning arborescences* and route packets along these arborescences to reach the destination. We show both deterministic and probabilistic routing techniques. The work involves both a deeply theoretical part and simulations showing the effectiveness of the proposed algorithms.

- [11] A. Dainotti, C. Squarcella, E. Aben, K. C. Claffy, **M. Chiesa**, M. Russo, A. Pescapé
 Analysis of Country-wide Internet Outages Caused by Censorship
 In *IEEE/ACM Transactions on Networking (ToN)*, 2014
 Impact factor: **1.811**
 Core ranking: **A***
 DOI: 10.1109/TNET.2013.2291244
 Scopus citations: **14**
 Preliminary paper: ACM IMC 2011, (rank **A+**)
 Scopus citations of preliminary paper: **106**
 Google scholar citations of journal and preliminary paper: **268**
Relevance: In this work, we studied the techniques used by governments to censor the Internet within a country and their impact on the incoming/outgoing communication from/to these countries. Our work shows that Internet protocols play a key role in the way governments cut their citizens from the Internet. This work has received mediatic attention, including videos from Epic Networks Lab (<https://www.youtube.com/watch?v=owzuoDGkxc>) and news from NewsWise (<https://www.newswise.com/articles/internet-censorship-revealed-through-the-haze-of-malware-pollution>). As a result, our work has been awarded the 2012 **IETF Applied Network Research Prize**.
- [12] **M. Chiesa**, L. Cittadini, L. Vanbever, S. Vissicchio, G. Di Battista
 Using Routers to Build Logic Circuits: How Powerful is BGP?
 In *IEEE International Conference on Network Protocols (ICNP)*, 2013
 DOI: 10.1109/ICNP.2013.6733584
 Acceptance rate: **18%**
 Conference ranking: **A**
 Scopus citations: **3**
 Google Scholar citations: **12**
Relevance: This is a follow-up of my INFOCOM 2011 work where we solve a decade long question about the complexity of verifying the correctness of a configuration of the standard de-facto interdomain routing protocol on the Internet, *i.e.*, BGP. Our findings unveil that verifying a BGP configuration is as hard as debugging any computer program, *i.e.*, it is Turing-complete. This work is part of my Ph.D. thesis. This surprising result led to a **Best Paper Award** at the IEEE ICNP conference (rank **A**) and an external nomination for the 2011 **IETF Applied Network Research Prize**.

Part XV: Invited Seminar Talks

- | | |
|---|-----------------|
| ○ Digitalize Stockholm | Remote |
| ○ <i>Enabling Machine-Learning Intelligence for Network Cybersecurity</i> | <i>Oct 2021</i> |
| ○ The 1st Network Verification Workshop @ Huawei - TU Berlin | Remote |
| ○ <i>Assessing the Performance of (Smart) Network Interface Cards</i> | <i>Jul 2021</i> |
| ○ Digital Futures Research Pairs workshop | Remote |
| ○ <i>Enabling Machine-Learning Intelligence for Network Cybersecurity</i> | <i>Apr 2021</i> |

- **Next Generation Networking UK weekly seminar** **Remote**
A High-Speed Load Balancer Design with Guaranteed Per-Connection-Consistency *Jun 2020*
- **Barefoot networks (Intel), US** **Remote**
A High-Speed Load Balancer Design with Guaranteed Per-Connection-Consistency *Mar 2020*
- **Ericsson internal talk** **Kista, Sweden**
A High-Speed Load Balancer Design with Guaranteed Per-Connection-Consistency *Nov 2019*
- **RIPE meeting** **Rotterdam, The Netherlands**
Internet Clouds are (also) unpredictable *Oct 2019*
- **NFS workshop: "Theory and Practice of Routing", Cornell University** **Ithaca, US**
Probabilistic and Deterministic Algorithms for Network Optimization and Resilience *Jun 2019*
- **ITN summer school, 3 hours** **Ericsson, Kista, Sweden**
SDN in the era of programmable dataplanes *May 2019*
- **RSLab seminar, KTH** **Kista, Sweden**
Making Internet Routing Robust and Dynamic *Mar 2019*
- **ACM SIGCOMM 2018** **Budapest, Hungary**
Preview session on "Routing" *Aug 2018*
- **P4 Workshop** **Stanford, CA, US**
P4 Fast Reroute: Keep Calm and Enjoy Programmability *Jun 2018*
- **RIPE Meeting** **Marseille, France**
Dynam-IX: a Dynamic Interconnection eXchange *May 2018*
- **Aalborg University** **Aalborg, Denmark**
Bootstrapping Internet Routing Innovation *Nov 2017*
- **University of Warwick** **Coventry, UK**
Routing the Future: Bootstrapping Internet Innovation *Jul 2017*
- **KTH Royal Institute of Technology** **Stockholm, Sweden**
Routing the Future: Bootstrapping Internet Innovation *Jun 2017*
- **University of Cambridge** **Cambridge, England, UK**
Routing the Future: Bootstrapping Internet Innovation *May 2017*
- **University of Edinburgh** **Edinburgh, Scotland, UK**
Routing the Future: Bootstrapping Internet Innovation *Apr 2017*
- **King Abdullah University of Science and Technology** **Thuwal, Saudi Arabia**
Securing Interdomain Routing Against Curious onlookers *Jan 2017*
- **Université catholique de Louvain** **Louvain-la-neuve, Belgium**
Routing the Future: Bootstrapping Internet Innovation *Jan 2017*
- **Fraunhofer SIT Institute** **Darmstadt, Germany**
Securing Internet Routing: an SDN Approach *Nov 2016*
- **Amsterdam Internet eXchange Point (AMS-IX)** **Amsterdam, Netherlands**
Securing Interdomain Routing Against Curious onlookers *Oct 2016*
- **Deutscher Commercial Internet Exchange (DE-CIX)** **Frankfurt, Germany**
Securing Interdomain Routing Against Curious onlookers *Mar 2016*

- **Summer Networking at the Hebrew University of Jerusalem**
Towards Optimized and Reliable Interdomain Routing
 - **Budapest University of Technology and Economics**
Towards Optimized and Reliable Interdomain Routing
 - **Université catholique de Louvain**
Towards Optimized and Reliable Interdomain Routing
 - **I-CORE Algo Day**
Traffic Engineering with Equal-Cost-Multipath: an Algorithmic Perspective
 - **University of Leicester**
Computational Complexity of Traffic Hijacking under BGP and S-BGP
 - **AlgoDEEP**
Local Transit Policies and the Complexity of BGP Stability Testing

Jerusalem, Israel
Jul 2015

Budapest, Hungary
Jun 2015

Louvain-la-neuve, Belgium
May 2015

Tel Aviv, Israel
Apr 2014

Leicester, UK
Jul 2012

Rome, Italy
Apr 2011

Part XIV: Conference/Workshop Talks

Conference rankings based on GGS.

- **ACM CoNEXT (ranking A)**
PURR: A Primitive for Reconfigurable Fast Reroute
 - **NEAT workshop, colocated with ACM SIGCOMM 2018**
Supporting Emerging Applications With Low-Latency Failover in P4
 - **ACM CoNEXT (ranking A)**
SIXPACK: Securing Internet eXchange Points Against Curious onlookers
 - **ACM CoNEXT (ranking A)**
Lying Your Way to Better Traffic Engineering
 - **IETF Applied Networking Research Workshop (ANRW)**
Towards Decentralized Fast Consistent Updates
 - **IETF Applied Networking Research Workshop (ANRW)**
Towards Securing Interdomain Routing Against Curious onlookers
 - **IEEE INFOCOM (ranking A⁺⁺)**
The Quest for Resilient Static Forwarding Tables
 - **IEEE INFOCOM (ranking A⁺⁺)**
Traffic Engineering with Equal-Cost-Multipath: an Algorithmic Perspective
 - **IEEE ICNP (ranking A)**
Using Routers to Build Logic Circuits: How Powerful is BGP?
 - **ICALP (ranking A)**
Computational Complexity of Traffic Hijacking under BGP and S-BGP
 - **IEEE INFOCOM (ranking A⁺⁺)**
Local Transit Policies and the Complexity of BGP Stability Testing

Orlando, FL, USA
Dec 2019

Budapest, Hungary
Aug 2018

Seoul, South Korea
Dec 2017

Irvine, CA, US
Dec 2016

Berlin, Germany
Jul 2016

Berlin, Germany
Jul 2016

San Francisco, CA, US
Apr 2016

Toronto, Canada
Apr 2014

Göttingen, Germany
Oct 2013

Warwick, UK
Jul 2012

Shanghai, China
Apr 2011

Part XVI: Research Visits ≥ 10 days

- **King Abdullah University of Science and Technology**
Invited visitor, Department of Computer Science

Thuwal, Saudi Arabia
Jan-Feb 2017

- Host: Prof. Marco Canini
Keywords: Internet architecture and security
- **Hebrew University of Jerusalem** **Jerusalem, Israel**
Invited visitor, Department of Computer Science *Mar 2016*
Host: Prof. Michael Schapira
Keywords: oblivious routing
 - **Budapest University of Technology and Economics** **Budapest, Hungary**
Invited visitor, Department of Computer Science *May 2015–Jun 2015*
Host: Dr. Gábor Rétvári
Keywords: oblivious routing
 - **UC Berkeley** **Berkeley, CA, US**
Invited visitor, Department of Computer Science *Aug 2014*
Host: Prof. Scott Shenker
Keywords: data-plane connectivity
 - **International Computer Science Institute and UC Berkeley** **Berkeley, CA, US**
Visiting Research Fellow, Department of Computer Science *Aug 2012–Dec 2013*
Host: Prof. Scott Shenker
Keywords: deflection switching, network utilization
 - **Hebrew University of Jerusalem** **Jerusalem, Israel**
Visiting Research Fellow, Department of computer Science *Oct 2012–Apr 2013*
Host: Prof. Michael Schapira
Keywords: traffic-engineering, ECMP
 - **University of Leicester** **Leicester, UK**
Visiting Student, Department of Computer Science *July 2012*
Host: Prof. Thomas Erlebach
Keywords: routing, bgp, migrations, algorithms
 - **Université catholique de Louvain** **Louvain-la-neuve, Belgium**
Visiting Student, IP Networking Lab, Department of Computer Science *May 2012*
Host: Prof. Olivier Bonaventure, Dr. Stefano Vissicchio, and Dr. Laurent Vanbever
Keywords: routing, bgp, migrations, point-of-presence design

Curriculum Vitae

NAME AND LAST NAME

Giordano Da Lozzo

AFFILIATION

Department of Engineering, Roma Tre University; **Address:** Via della Vasca Navale, 79, 00146, Rome, Italy

EDUCATION

ROMA TRE UNIVERSITY

PHD IN COMPUTER SCIENCE

Thesis title: Planar graphs with vertices in prescribed regions: models, algorithms, and complexity

Doctoral School of Engineering, Section of Informatics and Automation

May 2015 | Rome, IT

MASTER OF COMPUTER SCIENCE

Thesis title: Analysis and Design of a paradigm for the exploration and the visualization of relational data in mobile environment

Computur Networks Laboratory, Department of Informatics and Automation (DIA)

110/110 cum Laude

May 2010 | Rome, IT

ACADEMIC AND PROFESSIONAL EXPERIENCE

ROMA TRE UNIVERSITY

ASSISTANT PROFESSOR (RICERCATORE A TD, ART. 24, C. 3, LETTERA A), DELLA LEGGE 30/12/2010, N.240)

Feb 2021 - Feb 2024 | Rome, IT

POSTDOCTORAL RESEARCHER (ASSEGNISTA DI RICERCA, ART. 22 DELLA LEGGE 30/12/2010, N. 240)

Oct 2017 - Jan 2021 | Rome, IT

UNIVERSITY OF CALIFORNIA, IRVINE

ASSISTANT PROJECT SCIENTIST

Oct 2016 - Sept 2017 | Irvine, CA (USA)

ROMA TRE UNIVERSITY (PARTLY, CHARLES UNIVERSITY OF PRAGUE)

PHD STUDENT AND POSTDOCTORAL RESEARCHER (ASSEGNISTA DI RICERCA, ART. 22, L. 30/12/2010, N. 240)

Jan 2012 - Sept 2016 | Rome, IT

RIPE NETWORK COORDINATION CENTER

"LEONARDO DA VINCI PROGRAMME" FELLOW

June 2011 - Dec 2011 | Amsterdam, NL

INTER-UNIVERSITY CONSORTIUM FOR SUPERCOMPUTING APPLICATIONS IN UNIVERSITIES AND RESEARCH (CASPUR)

RESEARCH COLLABORATOR

Feb 2011 - May 2011 | Rome, IT

GRID COMPUTING LABORATORY, ENGINEERING S.P.A.

INTERN IN THE R&D DIVISION

Oct 2010 - Jan 2011 | Rome, IT

ROMA TRE UNIVERSITY

RESEARCH COLLABORATOR

June 2010 - Sept 2010 | Rome, IT

RESEARCH INTERESTS

My research interests are in Algorithm Engineering and Complexity, focused in particular on the theoretical questions arising from the **design and engineering of efficient algorithms for the analysis and visualization of networks**. The study of such questions has revealed to be central in modern, strategic, branches of Computer Science (and beyond) such as **Computer Networks, Data Science, Algorithmics for Big Data, Information Visualization, Social Network Analysis, Bioinformatics**, and many more.

Specifically, my primary area of research lies in **Graph Drawing**, a research field at the intersection of the areas of Computational Geometry, Combinatorial Optimization, Discrete Mathematics, and Graph Theory. Graph Drawing investigates algorithms and bounds to construct geometric and topological representations of graphs. My secondary area of research lies in **Computational Geometry** and **Graph Theory**. Computational Geometry is concerned with data structures and algorithms for solving problems exhibiting a geometric nature and with the numerical and computational issues related to the implementation of such algorithms. Applications of computational geometry include (but are not limited to) Robotics, Geographic Information Systems, Integrated Circuit Design, Computer-Aided Engineering, and Computer Vision. Graph Theory problems are concerned with the study of the properties of abstract graphs, both under the lenses of combinatorics and algorithmic complexity. Graph Theory finds applications in several areas of Science, including Computer Science, Physics, Chemistry, Biology, and Mathematics.

My research efforts revolve around the design and engineering of algorithms to construct representations of graphs with nice readability properties. I am deeply attracted by both combinatorial and geometric questions related to the representation of networks, especially those concerned with planarity and constrained graph embeddings in the plane and higher genus surfaces. I am involved in research projects exploring theoretical questions about the visualization of large and evolving networks, graph stories, topological graph theory, visualizations for cybersecurity, layouts of simultaneous and clustered networks, contact and hybrid representations of real-world graphs.

AWARDS

- 2019 Best Paper at IPEC 2019
- 2016 Best Paper at SOFSEM 2016
- 2015 Best Poster at GD 2016
- 2011 Best MS thesis by AICA-Confindustria
- 2011 "Leonardo da Vinci Programme" Scholarship

RESEARCH PROJECTS

2019 - 2021	AHeAD "efficient Algorithms for HARnessing networked Data" Role 1: Work Package Leader Role 2: Research associate, employed within the project	MIUR (PRIN17)
2017 - 2019	MODE "MORphing graph Drawings Efficiently" Role: Participant	MIUR (PRIN15)
2017 - 2019	MIUR-DAAD JMP N° 34120 "Algorithms and Models for Hybrid Representations of Locally-Dense Large Networks" Role: Participant	MIUR-DAAD Joint Mobility Program
2016 - 2017	STAC "The Space/Time Analysis for Cybersecurity program" Role: Assistant project scientist, employed within the project	U.S. DARPA
2014 - 2016	AMANDA "Algorithmics for MAssive and Networked DAta" Role: Research associate, employed within the project	MIUR (PRIN12)
2012 - 2014	LEONE "From global measurements to local management" Role: Research associate, employed within the project	EU FP7 STREP
2010 - 2013	GraDr "Graph Drawing and Representation" Role: Participant	EuroGIGA
2010 - 2012	AlgoDEEP "Algorithmic challenges for Data-intensivE processing on Emerging computing Platforms" Role: Participant	MIUR (PRIN08)

RELEVANT ROLES IN PROJECTS OF NATIONAL INTEREST

- Work Package Leader of the WP2: "Engineering new algorithms for social networks" for Project AHeAD "efficient Algorithms for HARnessing networked Data" (**MIUR PRIN 2017**).

RESEARCH STAYS

Sept 2016-Sept 2017	UC Irvine (Full-time Assistant Project Scientist - Step III)	California, USA
Dec 2019	Universität Tübingen (Visiting scholar fellow)	Germany
Jul 2018	Universität Tübingen (Visiting researcher)	Germany
Mar 2017	Universität Tübingen (Visiting researcher)	Germany
Mar 2017	Technische Universiteit Eindhoven (Visiting researcher)	The Netherlands
Nov 2014	Karlsruhe Institute of Technology (Visiting researcher)	Germany
Oct 2013 - Feb 2014	Charles University of Prague (Research fellow)	Czech Republic
Jun 2011 - Jan 2012	RIPE Network Coordination Center (Research fellow)	The Netherlands

TEACHING EXPERIENCE

PHD COURSES

2021	Co-teacher	Algorithmic Tools for Massive Network Analytics (16 hours) website: https://sites.google.com/view/algttools
2020	Main teacher	Algorithms for Big Data (10 hours) website: https://uniroma3.gitlab.io/compunet/gd/abd-phdcourse

MASTER'S COURSES

2021-2022	Teacher	Algorithms for Big Data (2 CFU/6 CFU)
2020-2021	Teacher	Algorithms for Big Data (2 CFU/6 CFU)
2019-2020	Lecturer & Teaching Assitant	Theoretical Computer Science I and II
2019-2020	Lecturer & Teaching Assitant	Information Visualization
2018-2019	Lecturer & Teaching Assitant	Theoretical Computer Science I and II
2018-2019	Lecturer & Teaching Assitant	Information Visualization
2017-2018	Lecturer & Teaching Assitant	Theoretical Computer Science I and II
2015-2016	Lecturer & Teaching Assitant	Theoretical Computer Science I and II
2015-2016	Lecturer & Teaching Assitant	Information Visualization
2014-2015	Lecturer & Teaching Assitant	Information Visualization
2013-2014	Lecturer & Teaching Assitant	Information Visualization

BACHELOR'S COURSES

2021-2022	Teacher	Elements of Computer Science and Linear Algebra (9 CFU)
2020-2021	Teacher	Elements of Computer Science and Linear Algebra (9 CFU)
2019-2020	Lecturer & Teaching Assitant	Foundations of Computer Science
2018-2019	Lecturer & Teaching Assitant	Foundations of Computer Science
2017-2018	Lecturer & Teaching Assitant	Foundations of Computer Science

UNIVERSITY SERVICE

2021-present	Member of the Faculty Committee of the XXXVII cycle ("XXXVII ciclo") of the PhD program in Computer and Automation Engineering	Roma Tre University
2021-present	Member of the Faculty Committee of the Bachelor's/Master's degree program in Computer and Automation Engineering	Roma Tre University
2021-present	Member of the Faculty Committee of the Bachelor's degree program in Marine Technologies Engineering	Roma Tre University

(CO-)SUPERVISED STUDENTS

2020	Fabrizio Grosso	Algorithms for the Visualization of Graphs on a Stream
2015	Francesco Elefante	Design of a Visualization System for Geo-referenced Graphs

JOURNAL EDITORSHIP

2021	Guest editors: G. Da Lozzo and P. Kindermann	Special Issue on “Parameterized and Approximation Algorithms in Graph Drawing” of the Journal of Graph Algorithms and Applications (JGAA) Call for papers: https://jgaa.info/docs/cfp-param-algo.pdf
------	--	---

WORKSHOP ORGANIZATION

31 Sept, 2021 – 5 Aug 2021	Co-organized with Patrignani M. and Frati F.	Summer Workshop on Graph Drawing (SWGD 2021) website: http://www.dia.uniroma3.it/~dalozzo/SWGD2021/ Location: Castiglione del Lago, PG, Italy
-------------------------------	--	--

SERVICE TO THE COMMUNITY

PROGRAM COMMITTEES

2022	34th Canadian Conference on Computational Geometry (CCCG 2022)
2022	38th European Workshop on Computational Geometry (EuroCG 2022)
2021	16th International Symposium on Algorithms and Data Structures (WADS'21)
2019	27th International Symposium on Graph Drawing and Network Visualization (GD'19)
2017	25th International Symposium on Graph Drawing and Network Visualization (GD'17)

REFeree WORK

Project Funding:	Czech Science Foundation (GA CR)
Journals:	ACM Transactions on Algorithms (TALG), Algorithmica, Theoretical Computer Science (TCS), Journal of Graph Algorithms and Applications (JGAA), Journal of Visual Languages & Computing (JVL), and Computational Geometry: Theory and Applications (CGTA)
Conferences:	European Symposium on Algorithms (ESA), Symposium on Computational Geometry (SoCG), International Symposium on Graph Drawing & Network Visualization (GD), International Symposium on Algorithms and Computation (ISAAC), European Workshop on Computational Geometry (EuroCG), Canadian Conference on Computational Geometry (CCCG), International Conference on Algorithms and Discrete Applied Mathematics (CALDAM), and Symposium on Experimental Algorithms (SEA). Editions: CCCG 2022, EuroCG 2022, WADS 2021, GD 2020, ESA 2020 (Track A), EuroCG 2020, ESA 2019 (Track A), GD 2018, SoCG 2018, GD 2012, ISAAC 2017, EuroCG 2017, CIAC 2017, ISAAC 2016, GD 2016, CALDAM 2016, GD 2015, CALDAM 2015, ISAAC 2014, GD 2014, ESA 2014 (Track A), WALCOM 2014, GD 2013, and SEA 2013.

INVITATION-ONLY WORKSHOPS

Sep 2021	Summer Workshop on Graph Drawing (SWGD '21)	Castiglione del Lago, IT
Feb 2021	Dagstuhl Seminar “Parameterized Complexity in Graph Drawing”	Dagstuhl, DE
Mar 2021	Bertinoro Workshop on Graph Drawing (BWGD'21)	Bertinoro, IT
Feb 2019	Workshop on Graph and Network Visualization (GNV'2019)	Heiligkreuztal, DE
Mar 2019	Bertinoro Workshop on Graph Drawing (BWGD'19)	Bertinoro, IT
Mar 2019	Dagstuhl Seminar “Beyond-Planar Graphs: Algorithmics and Combinatorics”	Dagstuhl, DE
Jul 2018	Workshop on Graph and Network Visualization (GNV'2018)	Heiligkreuztal, DE
Mar 2018	Bertinoro Workshop on Graph Drawing (BWGD'18)	Bertinoro, IT
Jun 2017	MRC Conference on Beyond Planarity: Crossing Numbers of Graphs	Snowbird, UT USA
Mar 2017	Bertinoro Workshop on Graph Drawing (BWGD'17)	Bertinoro, IT
Nov 2016	Dagstuhl Seminar “Beyond-Planar Graphs: Algorithmics and Combinatorics”	Dagstuhl, DE
Mar 2016	Bertinoro Workshop on Graph Drawing (BWGD'16)	Bertinoro, IT
Mar 2015	Bertinoro Workshop on Graph Drawing (BWGD'15)	Bertinoro, IT
Mar 2014	Bertinoro Workshop on Graph Drawing (BWGD'14)	Bertinoro, IT
Mar 2013	Bertinoro Workshop on Graph Drawing (BWGD'13)	Bertinoro, IT

INVITED TALKS

2021	How to draw a graph: a gentle introduction to Graph Drawing	LUISS University, Rome, IT
------	---	-------------------------------

CONFERENCE TALKS

SODA'21	2-Level Quasi-Planarity or How Caterpillars Climb (SPQR-)Trees	Alexandria, VA, USA
COCOON'20	On the Area Requirements of Planar Greedy Drawings of Triconnected Planar Graphs	Atlanta, GA, USA
GD'19	Graph Stories in Small Area	Prague, CZ
IWOCA'19	Reaching 3-Connectivity via Edge-edge Additions	Pisa, IT
ISAAC'18	Approximation Algorithms for Facial Cycles in Planar Embeddings	Jiaoxi, TW
GD'16	Beyond Level Planarity	Athens, GR
GD'15	Intersection-Link Representations of Graphs	Los Angeles, CA
GD'15	On the Relationship between Map Graphs and Clique Planar Graphs	Los Angeles, CA
CIAC'15	Planarity of Streamed Graphs	Paris, FR
ISAAC'14	Planar Embeddings with Small and Uniform Faces	Jeonju, KR
GD'14	The Importance of Being Proper (In Clustered-Level Planarity and T-Level Planarity)	Würzburg, DE
ICGT'14	SEFE = C-Planarity?	Grenoble, FR
GD'13	Drawing Non-planar Graphs with Crossing-free Subgraphs	Bordeaux, FR
WIV'12	Visual discovery of the correlation between BGP routing and round-trip delay active measurements	Boston, MA

ATTENDED PH.D. SCHOOLS AND DOCTORAL COURSES

Sept 2018	Recent trends in Graph Drawing and Network Visualization" (taught by Patrizio Angelini, David Auber, Anna Lubiw, Hans-Jörg Schulz)	Barcelona, ES
Sept 2014	EuroGIGA PhD School: "Recent Trends in Graph Drawing – Curves, Crossings, and Constraints" (taught by David Eppstein, Fabrizio Frati, Stephen Kobourov, Maarten Löffler, Ignaz Rutter, André Schulz)	Würzburg, DE
June 2013	Computational Geometry and Graph Drawing (taught by Alexander Wolf and Maurizio Patrignani)	Rome, IT
Nov 2013	The Tutte Polynomial (taught by Jaroslav Nesetril and Andrew Goodall)	Prague, CZ
Jul 2013	Algorithmic Graph Theory (taught by Flavia Bonomo)	Rome, Italy
Feb 2013	Readings in Network Visualization (taught by Giuseppe Di Battista and Ioannis G. Tollis)	Rome, IT
Oct 2012	EuroGIGA Fall School 2012: "Graph- and GeoVisualization" (taught by Maurizio Patrignani, Martin Nöllenburg, Christophe Hurter, Jan-Henrik Haurert)	Würzburg, DE
Aug 2012	13th Max Planck Advanced Course on the Foundations of Computer Science (taught by Luca Trevisan, Berthold Vöcking, Avi Wigderson)	Saarbrücken, DE





COMPUTER SKILLS

Front-end and visualization	JavaScript libraries (D3.js, Vue, Angular, React, jQuery, Raphaël, Paper.js), Node.js sever platform (Express, Socket.IO, Redis.IO), SVG, HTML5 Canvas, OpenGL, OpenGL ES, WebGL (Three.js)
Programming languages	Java, J2EE (Jsp, Servlet), C, Objective-C, Python, PLaSM, MATLAB, JavaScript, TypeScript, Bash scripting, Turbo Pascal, Prolog, Golog, OCaml
Operating systems	Mac OS X, GNU/Linux distributions, MS Windows, Android OS, iOS
Cloud technologies systems	Google App Engine, Microsoft Windows Azure, force.com
DBMS and query languages	DB2, PostgreSQL, MySQL, HSQLDB, SQLite, FQL, XQuery, XPath
Libraries for concurrent programming	POSIX Threads Programming, java.util.concurrent
Frameworks	NumPySciPy, Pandas, Java Plugin Framework (JPF), Apache Struts, Google Android SDK, Java Swing, Socket Programming, Facebook Graph API, Google Social Graph API
Markup and typesetting	LATEX2, BIBTEX2, Markdown, Gnuplot

List of Publications

<http://www.dia.uniroma3.it/~dalozzo> giordano.dalozzo@uniroma3.it

Links to Bibliographic Information

	Orcid	http://orcid.org/0000-0003-2396-5174
	DBLP	https://dblp.uni-trier.de/pers/hd/l/Lozzo:Giordano_Da
	Google Scholar	http://scholar.google.com/citations?user=2f0iSvUAAAAJ&hl=en
	Homepage	http://www.dia.uniroma3.it/~dalozzo

Metrics Overview

Documents:	71	
Citations:	553	[source: Google Scholar – Oct 22, 2021]
H-index:	13	[source: Google Scholar – Oct 22, 2021]
i10-index:	18	[source: Google Scholar – Oct 22, 2021]

PhD thesis and Book Chapters

- [1] Patrizio Angelini and Giordano Da Lozzo. Beyond clustered planar graphs. In Seok-Hee Hong and Takeshi Tokuyama, editors, *Beyond Planar Graphs*, Communications of NII Shonan Meetings, pages 211–235. Springer, 2020.
- [2] Giordano Da Lozzo. Planar Graphs with Vertices in Prescribed Regions: models, algorithms, and complexity. PhD thesis, Università degli Studi di Roma “Roma Tre”, Dottorato di Ricerca in Ingegneria, Sezione Informatica ed Automazione, XXVII Ciclo, 2015.

Refereed Journal Articles

- [3] Fidel Barrera-Cruz, Manuel Borrasso, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. How to morph a tree on a small grid. *Discrete and Computational Geometry*, 2021. To Appear.
- [4] Giordano Da Lozzo, David Eppstein, Michael T. Goodrich, and Siddharth Gupta. C-planarity testing of embedded clustered graphs with bounded dual carving-width. *Algorithmica*, 83(8):2471–2502, 2021.
- [5] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Upward planar morphs. *Algorithmica*, 82(10):2985–3017, 2020.
- [6] Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Extending upward planar graph drawings. *Comput. Geom.*, 91:101668, 2020.
- [7] Giordano Da Lozzo, Anthony D’Angelo, and Fabrizio Frati. On planar greedy drawings of 3-connected planar graphs. *Discret. Comput. Geom.*, 63(1):114–157, 2020.
- [8] Patrizio Angelini, Michael A. Bekos, Franz J. Brandenburg, Giordano Da Lozzo, Giuseppe Di Battista, Walter Didimo, Michael Hoffmann, Giuseppe Liotta, Fabrizio Montecchiani, Ignaz Rutter, and Csaba D. Tóth. Simple k -planar graphs are simple $((k+1)$ -quasiplanar. *J. Comb. Theory, Ser. B*, 142:1–35, 2020.
- [9] Patrizio Angelini and Giordano Da Lozzo. Clustered planarity with pipes. *Algorithmica*, 81(6):2484–2526, 2019.
- [10] Giordano Da Lozzo and Ignaz Rutter. Planarity of streamed graphs. *Theor. Comput. Sci.*, 799:1–21, 2019.
- [11] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Beyond level planarity: Cyclic, torus, and simultaneous level planarity. *Theor. Comput. Sci.*, 804:161–170, 2020.
- [12] Manuel Borrasso, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Graph stories in small area. *J. Graph Algorithms Appl.*, 24(3):269–292, 2020.

- [13] Robin Anderson, Shuliang Bai, Fidel Barrera-Cruz, Éva Czabarka, Giordano Da Lozzo, Natalie L. F. Hobson, Jephian C.-H. Lin, Austin Mohr, Heather C. Smith, László A. Székely, and Hays Whitlatch. Analogies between the crossing number and the tangle crossing number. *Electr. J. Comb.*, 25(4):P4.24, 2018.
- [14] Patrizio Angelini, Giordano Da Lozzo, Marco Di Bartolomeo, Valentino Di Donato, Maurizio Patrignani, Vincenzo Roselli, and Ioannis G. Tollis. Algorithms and bounds for L-drawings of directed graphs. *Int. J. Found. Comput. Sci.*, 29(4):461–480, 2018.
- [15] Patrizio Angelini and Giordano Da Lozzo. 3-coloring arrangements of line segments with 4 slopes is hard. *Inf. Process. Lett.*, 137:47–50, 2018.
- [16] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Computing node-trix representations of clustered graphs. *J. Graph Algorithms Appl.*, 22(2):139–176, 2018.
- [17] Giordano Da Lozzo, Vida Dujmovic, Fabrizio Frati, Tamara Mchedlidze, and Vincenzo Roselli. Drawing planar graphs with many collinear vertices. *JoCG*, 9(1):94–130, 2018.
- [18] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Valentino Di Donato, Philipp Kindermann, Günter Rote, and Ignaz Rutter. Windrose planarity: Embedding graphs with direction-constrained edges. *ACM Trans. Algorithms*, 14(4):54:1–54:24, 2018.
- [19] Soroush Alamdari, Patrizio Angelini, Fidel Barrera-Cruz, Timothy M. Chan, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Penny Haxell, Anna Lubiw, Maurizio Patrignani, Vincenzo Roselli, Sahil Singla, and Bryan T. Wilkinson. How to morph planar graph drawings. *SIAM J. Comput.*, 46(2):824–852, 2017.
- [20] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Strip planarity testing for embedded planar graphs. *Algorithmica*, 77(4):1022–1059, 2017.
- [21] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Intersection-link representations of graphs. *Journal of Graph Algorithms and Applications*, 21(4):731–755, 2017.
- [22] Patrizio Angelini and Giordano Da Lozzo. SEFE = c-planarity? *The Computer Journal*, 59(12):1831–1838, 2016.
- [23] Patrizio Angelini, Carla Binucci, Giordano Da Lozzo, Walter Didimo, Luca Grilli, Fabrizio Montecchiani, Maurizio Patrignani, and Ioannis Tollis. Algorithms and bounds for drawing non-planar graphs with crossing-free subgraphs. *Computational Geometry: Theory and Applications*, 50:34–48, 2015.
- [24] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Relaxing the constraints of clustered planarity. *Computational Geometry: Theory and Applications*, 48(2):42–75, 2015.
- [25] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Vincenzo Roselli. The importance of being proper: (in clustered-level planarity and t-level planarity). *Theoretical Computer Science*, 571:1–9, 2015.
- [26] Patrizio Angelini, Giordano Da Lozzo, and Daniel Neuwirth. Advancements on SEFE and partitioned book embedding problems. *Theoretical Computer Science*, 575:71–89, 2015.
- [27] Giordano Da Lozzo, Giuseppe Di Battista, and Claudio Squarcella. Visual discovery of the correlation between BGP routing and round-trip delay active measurements. *Computing*, 96(1):67–77, 2014.
- [28] Giordano Da Lozzo, Giuseppe Di Battista, and Francesco Ingrassia. Drawing graphs on a smartphone. *Journal of Graph Algorithms and Applications*, 16(1):109–126, 2012.

Refereed Conference Publications

- [29] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. 2-level quasi-planarity or how caterpillars climb (spqr-)trees. In Dániel Marx, editor, *Proceedings of the 2021 ACM-SIAM Symposium on Discrete Algorithms, SODA 2021, Virtual Conference, January 10 - 13, 2021*, pages 2779–2798. SIAM, 2021.
- [30] Steven Chaplick, Giordano Da Lozzo, Emilio Di Giacomo, Giuseppe Liotta, and Fabrizio Montecchiani. Planar drawings with few slopes of halin graphs and nested pseudotrees. In Anna Lubiw and Mohammad R. Salavatipour, editors, *Algorithms and Data Structures - 17th International Symposium, WADS 2021, Virtual Event, August 9-11, 2021, Proceedings*, volume 12808 of *Lecture Notes in Computer Science*, pages 271–285. Springer, 2021.
- [31] Sujoy Bhore, Giordano Da Lozzo, Fabrizio Montecchiani, and Martin Nöllenburg. On the upward book thickness problem: Combinatorial and complexity results. In Helen Purchase and Ignaz Rutter, editors, *Proc. 29th International Symposium on Graph Drawing and Network Visualization (GD 2021)*. Springer, 2021. To Appear.
- [32] Carlos Alegría, Manuel Borrazzo, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Planar straight-line realizations of 2-trees with prescribed edge lengths. In Helen Purchase and Ignaz Rutter, editors, *Proc. 29th International Symposium on Graph Drawing and Network Visualization (GD 2021)*. Springer, 2021. To Appear.

- [33] Giordano Da Lozzo, Anthony D'Angelo, and Fabrizio Frati. On the area requirements of planar greedy drawings of triconnected planar graphs. In Donghyun Kim, R. N. Uma, Zhipeng Cai, and Dong Hoon Lee, editors, Computing and Combinatorics - 26th International Conference, COCOON 2020, Atlanta, GA, USA, August 29-31, 2020, Proceedings, volume 12273 of LNCS, pages 435–447. Springer, 2020.
- [34] Michael A. Bekos, Giordano Da Lozzo, Svenja Griesbach, Martin Gronemann, Fabrizio Montecchiani, and Chrysanthi N. Raftopoulou. Book embeddings of nonplanar graphs with small faces in few pages. In Sergio Cabello and Danny Z. Chen, editors, 36th International Symposium on Computational Geometry, SoCG 2020, June 23-26, 2020, Zürich, Switzerland, volume 164 of LIPIcs, pages 16:1–16:17. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2020.
- [35] Giordano Da Lozzo, David Eppstein, Michael T. Goodrich, and Siddharth Gupta. C-planarity testing of embedded clustered graphs with bounded dual carving-width. In Bart M. P. Jansen and Jan Arne Telle, editors, 14th International Symposium on Parameterized and Exact Computation, IPEC 2019, September 11-13, 2019, Munich, Germany, volume 148 of LIPIcs, pages 9:1–9:17. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2019. [Best paper.](#)
- [36] Juan José Besa Vial, Giordano Da Lozzo, and Michael T. Goodrich. Computing k-modal embeddings of planar digraphs. In Michael A. Bender, Ola Svensson, and Grzegorz Herman, editors, 27th Annual European Symposium on Algorithms, ESA 2019, September 9-11, 2019, Munich/Garching, Germany, volume 144 of LIPIcs, pages 19:1–19:16. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2019.
- [37] Manuel Borrizzo, Giordano Da Lozzo, Fabrizio Frati, and Maurizio Patrignani. Graph stories in small area. In Daniel Archambault and Csaba D. Tóth, editors, Graph Drawing and Network Visualization - 27th International Symposium, GD 2019, Prague, Czech Republic, September 17-20, 2019, Proceedings, volume 11904 of LNCS, pages 545–558. Springer, 2019.
- [38] Patrizio Angelini, Steven Chaplick, Sabine Cornelsen, Giordano Da Lozzo, and Vincenzo Roselli. Morphing contact representations of graphs. In Gill Barequet and Yusu Wang, editors, 35th International Symposium on Computational Geometry, SoCG 2019, June 18-21, 2019, Portland, Oregon, USA., volume 129 of LIPIcs, pages 10:1–10:16. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2019.
- [39] Carla Binucci, Giordano Da Lozzo, Emilio Di Giacomo, Walter Didimo, Tamara Mchedlidze, and Maurizio Patrignani. Upward book embeddings of st-graphs. In Gill Barequet and Yusu Wang, editors, 35th International Symposium on Computational Geometry, SoCG 2019, June 18-21, 2019, Portland, Oregon, USA., volume 129 of LIPIcs, pages 13:1–13:22. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2019.
- [40] Giordano Da Lozzo and Ignaz Rutter. Reaching 3-connectivity via edge-edge additions. In Charles J. Colbourn, Roberto Grossi, and Nadia Pisanti, editors, Combinatorial Algorithms - 30th International Workshop, IWOCA 2019, Pisa, Italy, July 23-25, 2019, Proceedings, volume 11638 of LNCS, pages 175–187. Springer, 2019.
- [41] Fidel Barrera-Cruz, Manuel Borrizzo, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. How to morph a tree on a small grid. In Zachary Friggstad, Jörg-Rüdiger Sack, and Mohammad R. Salavatipour, editors, Algorithms and Data Structures - 16th International Symposium, WADS 2019, Edmonton, AB, Canada, August 5-7, 2019, Proceedings, volume 11646 of LNCS, pages 57–70. Springer, 2019.
- [42] Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Extending upward planar graph drawings. In Zachary Friggstad, Jörg-Rüdiger Sack, and Mohammad R. Salavatipour, editors, Algorithms and Data Structures - 16th International Symposium, WADS 2019, Edmonton, AB, Canada, August 5-7, 2019, Proceedings, volume 11646 of LNCS, pages 339–352. Springer, 2019.
- [43] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Upward planar morphs. In Therese C. Biedl and Andreas Kerren, editors, Graph Drawing and Network Visualization - 26th International Symposium, GD 2018, Barcelona, Spain, September 26-28, 2018, Proceedings, volume 11282 of LNCS, pages 92–105. Springer, 2018.
- [44] Giordano Da Lozzo and Ignaz Rutter. Approximation algorithms for facial cycles in planar embeddings. In Wen-Lian Hsu, Der-Tsai Lee, and Chung-Shou Liao, editors, 29th International Symposium on Algorithms and Computation, ISAAC 2018, December 16-19, 2018, Jiaoxi, Yilan, Taiwan, volume 123 of LIPIcs, pages 41:1–41:13. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2018.
- [45] Giordano Da Lozzo, David Eppstein, Michael T. Goodrich, and Siddharth Gupta. Subexponential-time and FPT algorithms for embedded flat clustered planarity. In Andreas Brandstädt, Ekkehard Köhler, and Klaus Meer, editors, Graph-Theoretic Concepts in Computer Science - 44th International Workshop, WG 2018, Cottbus, Germany, June 27-29, 2018, Proceedings, volume 11159 of LNCS, pages 111–124. Springer, 2018.
- [46] Giordano Da Lozzo, William E. Devanny, David Eppstein, and Timothy Johnson. Square-contact representations of partial 2-trees and triconnected simply-nested graphs. In ISAAC, volume 92 of LIPIcs, pages 24:1–24:14. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2017.
- [47] Steven Chaplick, Markus Chimani, Sabine Cornelsen, Giordano Da Lozzo, Martin Nöllenburg, Maurizio Patrignani, Ioannis G. Tollis, and Alexander Wolff. Planar l-drawings of directed graphs. In Graph Drawing, volume 10692 of LNCS, pages 465–478. Springer, 2017.

- [48] Patrizio Angelini, Michael A. Bekos, Franz J. Brandenburg, Giordano Da Lozzo, Giuseppe Di Battista, Walter Didimo, Giuseppe Liotta, Fabrizio Montecchiani, and Ignaz Rutter. On the relationship between k -planar and k -quasi-planar graphs. In WG, volume 10520 of LNCS, pages 59–74. Springer, 2017.
- [49] Patrizio Angelini, Michael A. Bekos, Franz J. Brandenburg, Giordano Da Lozzo, Giuseppe Di Battista, Walter Didimo, Giuseppe Liotta, Fabrizio Montecchiani, and Ignaz Rutter. On the relationship between k -planar and k -quasi planar graphs. In (Informal) Proceedings of the 33rd European Workshop on Computational Geometry, Malmo, Sweden, April 5-7, 2017, 2017.
- [50] Giordano Da Lozzo, Anthony D'Angelo, and Fabrizio Frati. On planar greedy drawings of 3-connected planar graphs. In Symposium on Computational Geometry, volume 77 of LIPIcs, pages 33:1–33:16. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2017.
- [51] Patrizio Angelini and Giordano Da Lozzo. Clustered planarity with pipes. In Seok-Hee Hong, editor, 27th International Symposium on Algorithms and Computation, ISAAC 2016, December 12-14, 2016, Sydney, Australia, volume 64 of LIPIcs, pages 13:1–13:13. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2016.
- [52] Giordano Da Lozzo, Vida Dujmovic, Fabrizio Frati, Tamara Mchedlidze, and Vincenzo Roselli. Drawing planar graphs with many collinear vertices. In Graph Drawing, volume 9801 of LNCS, pages 152–165. Springer, 2016.
- [53] Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Maurizio Patrignani. Computing node-trix representations of clustered graphs. In Graph Drawing, volume 9801 of LNCS, pages 107–120. Springer, 2016.
- [54] Patrizio Angelini, Steven Chaplick, Sabine Cornelsen, Giordano Da Lozzo, Giuseppe Di Battista, Peter Eades, Philipp Kindermann, Jan Kratochvíl, Fabian Lipp, and Ignaz Rutter. Simultaneous orthogonal planarity. In Graph Drawing, volume 9801 of LNCS, pages 532–545. Springer, 2016.
- [55] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Beyond Level Planarity. In Graph Drawing, volume 9801 of LNCS, pages 482–495. Springer, 2016.
- [56] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Valentino Di Donato, Philipp Kindermann, Günter Rote, and Ignaz Rutter. Windrose planarity: Embedding graphs with direction-constrained edges. In SODA, pages 985–996. SIAM, 2016.
- [57] Patrizio Angelini, Giordano Da Lozzo, Marco Di Bartolomeo, Valentino Di Donato, Maurizio Patrignani, Vincenzo Roselli, and Ioannis G. Tollis. L-drawings of directed graphs. In SOFSEM, LNCS. *Best paper*.
- [58] Patrizio Angelini, Giordano Da Lozzo, Fabrizio Frati, Anna Lubiw, Maurizio Patrignani, and Vincenzo Roselli. Optimal morphs of convex drawings. In Lars Arge and János Pach, editors, 31st International Symposium on Computational Geometry, SoCG 2015, June 22-25, 2015, Eindhoven, The Netherlands, volume 34 of LIPIcs, pages 126–140. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2015.
- [59] Giordano Da Lozzo and Ignaz Rutter. Planarity of streamed graphs. In Algorithms and Complexity - 9th International Conference, CIAC 2015, Paris, France, May 20-22, 2015. Proceedings, LNCS, pages 153–166, 2015.
- [60] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. Intersection-link representations of graphs. In Graph Drawing - 23rd International Symposium, GD 2015, Los Angeles, CA, September 24-26, 2015, Revised Selected Papers, LNCS, pages 217–230, 2015.
- [61] Giordano Da Lozzo, Marco Di Bartolomeo, Maurizio Patrignani, Giuseppe Di Battista, Davide Cannone, and Sergio Tortora. Drawing georeferenced graphs - combining graph drawing and geographic data. In José Braz, Andreas Kerren, and Lars Linsen, editors, IVAPP 2015 - Proceedings of the 6th International Conference on Information Visualization Theory and Applications, Berlin, Germany, 11-14 March, 2015., pages 109–116. SciTePress, 2015.
- [62] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, and Vincenzo Roselli. The importance of being proper: (in clustered-level planarity and t -level planarity). In Christian A. Duncan and Antonios Symvonis, editors, Graph Drawing - 22nd International Symposium, GD 2014, Würzburg, Germany, September 24-26, 2014, Revised Selected Papers, volume 8871 of LNCS, pages 246–258. Springer, 2014.
- [63] Patrizio Angelini, Giordano Da Lozzo, Marco Di Bartolomeo, Giuseppe Di Battista, Seok-Hee Hong, Maurizio Patrignani, and Vincenzo Roselli. Anchored drawings of planar graphs. In Graph Drawing - 22nd International Symposium, GD 2014, Würzburg, Germany, September 24-26, 2014, Revised Selected Papers, LNCS, pages 404–415, 2014.
- [64] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Vincenzo Roselli. Morphing planar graph drawings optimally. In Automata, Languages, and Programming - 41st International Colloquium, ICALP 2014, Copenhagen, Denmark, July 8-11, 2014, Proceedings, Part I, LNCS, pages 126–137, 2014.
- [65] Giordano Da Lozzo, Vít Jelínek, Jan Kratochvíl, and Ignaz Rutter. Planar embeddings with small and uniform faces. In Algorithms and Computation - 25th International Symposium, ISAAC 2014, Jeonju, Korea, December 15-17, 2014, Proceedings, LNCS, pages 633–645, 2014.

- [66] Patrizio Angelini, Giordano Da Lozzo, and Daniel Neuwirth. On some np-complete SEFE problems. In Algorithms and Computation - 8th International Workshop, WALCOM 2014, Chennai, India, February 13-15, 2014, Proceedings, LNCS, pages 200–212, 2014.
- [67] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, and Fabrizio Frati. Strip planarity testing. In Graph Drawing - 21st International Symposium, GD 2013, Bordeaux, France, September 23-25, 2013, Revised Selected Papers, LNCS, pages 37–48, 2013.
- [68] Patrizio Angelini, Carla Binucci, Giordano Da Lozzo, Walter Didimo, Luca Grilli, Fabrizio Montecchiani, Maurizio Patrignani, and Ioannis G. Tollis. Drawing non-planar graphs with crossing-free subgraphs. In Graph Drawing - 21st International Symposium, GD 2013, Bordeaux, France, September 23-25, 2013, Revised Selected Papers, LNCS, pages 292–303, 2013.
- [69] Giordano Da Lozzo, Giuseppe Di Battista, and Francesco Ingrassia. Drawing graphs on a smartphone. In Graph Drawing - 18th International Symposium, GD 2010, Konstanz, Germany, September 21-24, 2010. Revised Selected Papers, LNCS, pages 153–164, 2010.

Posters

- [70] Patrizio Angelini, Giordano Da Lozzo, Giuseppe Di Battista, Fabrizio Frati, Maurizio Patrignani, and Ignaz Rutter. On the relationship between map graphs and clique planar graphs. In Emilio Di Giacomo and Anna Lubiw, editors, Proc. 23rd International Symposium on Graph Drawing and Network Visualization (GD '15), LNCS, 2015. *Best poster*.
- [71] Giordano Da Lozzo, Giuseppe Di Battista, and Claudio Squarcella. Visual discovery of the correlation between bgp routing and round-trip delay active measurements. In 1st IMC Workshop on Internet Visualization (WIV 2012), 2012.

Curriculum vitae di Fabio D'Andreagiovanni

Informazioni Personali

Nome: Fabio
Cognome: D'Andreagiovanni
Data di nascita: [REDACTED]
Luogo di Nascita: [REDACTED]
Cittadinanza: [REDACTED]
Indirizzo di residenza : [REDACTED]
Numero di cellulare: [REDACTED]
PEC: [REDACTED]
Email: [REDACTED]

Posizione ricoperta attualmente

Dal 10/2016

"Chargé de Recherche" (posizione di ricercatore a tempo indeterminato corrispondente ad una posizione di **Professore Associato** secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR)

Centre National de la Recherche Scientifique (CNRS), Francia

(assunto con il grado superiore di "*Première Classe (CR1)*" (Prima Classe) e convertito al grado di "*Classe Normale (CRCN)*" (Classe Normale) nel 10/2017, a seguito della riforma che ha fuso i gradi di *Prima Classe (CR1)* e *Seconda Classe (CR2)* nella *Classe Normale*).

Assegnato al **Laboratorio di Ricerca HEUDIASYC** ("HEUristique et DIAgnostic des SYstèmes Complexes" - UMR CNRS 7253) e **Docente** del **Département Génie Informatique** (Dipartimento di Ingegneria Informatica), **Université de Technologie de Compiègne (UTC)** (*Grande École d'Ingénieurs*) - **Sorbonne University Alliance**, Compiègne, France

Istruzione

11/2006 - 01/2010

Dottorato di Ricerca in Ricerca Operativa, Sapienza Università di Roma (Roma, Italia), conseguito in data 18/01/2010; Tesi di Dottorato: "Pure 0-1 Programming approaches to Wireless Network Design", premiata con:

- l' **INFORMS Doctoral Dissertation Award for Operations Research in Telecommunications 2010**
- il **Premio Tesi di Dottorato Sapienza Università di Roma 2012**

02/2004 - 05/2006

Laurea Specialistica in Ingegneria Gestionale, Sapienza Università di Roma (Roma, Italia) (**110/110 e lode**), conseguita in data 30/05/2006.

Tesi di Laurea Specialistica: "Instradamento ottimo con vincoli di QoS in reti di telecomunicazioni"

Premiata con il **Premio di Laura Accenture 2004/05 - Ingegneria Gestionale**

09/2000 - 02/2004

Laurea Triennale in Ingegneria Gestionale, Sapienza Università di Roma (Roma, Italia) (**110/110 e lode**), conseguita in data 24/02/2004.

Tesi di Laurea: "Assegnazione ottima di frequenze per tecniche di Frequency Hopping"

Posizioni ricoperte presso Atenei e Centri di Ricerca in Italia e all'estero

- Dal 10/2016** **“Chargé de Recherche”** (posizione di ricercatore a tempo indeterminato corrispondente ad una posizione di Professore Associato secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR)
Centre National de la Recherche Scientifique (CNRS), Francia
(assunto con il grado superiore di *“Première Classe (CR1)”* (Prima Classe) e convertito al grado di *“Classe Normale (CRCN)”* (Classe Normale) nel 10/2017, a seguito della riforma che ha fuso i gradi di *Prima Classe (CR1)* e *Seconda Classe (CR2)* nella *Classe Normale*).
Assegnato al **Laboratorio di Ricerca HEUDIASYC** (“HEUristique et DIAgnostic des SYstèmes Complexes” - UMR CNRS 7253) e **Docente del Département Génie Informatique** (Dipartimento di Ingegneria Informatica), **Université de Technologie de Compiègne (UTC)** (*Grande École d'Ingénieurs*) - **Sorbonne University Alliance**, Compiègne, Francia.
Membro del Gruppo di Ricerca “SCOP - Safety, Communications, Optimization” del Laboratorio di Ricerca **HEUDIASYC**.
- Dal 10/2015** **Lecturer**, Master of Science Program in Global Production Engineering, Faculty V of Mechanical Engineering and Transport Systems, **Technische Universität Berlin**, Berlino, Germania
- 10/2015 - 09/2016** **Head of Research Group**, Gruppo di Ricerca “Mathematics of Telecommunications”, Department of Mathematical Optimization, **Zuse Institute Berlin (ZIB)**, Berlino, Germania
- 10/2015 - 09/2016** **Lecturer**, Department of Mathematics and Computer Science, **Freie Universität Berlin**, Berlino, Germania
- 03/2014 - 09/2016** **Research Fellow** (in qualità di **co-Principal Investigator** di progetto di ricerca finanziato da ECMath), **Einstein Center for Mathematics Berlin (EC Math)**, Berlino, Germania
- 06/2014 - 09/2016** **“Wissenschaftlicher Mitarbeiter”** (ricercatore postdottorale, corrispondente ad una posizione di Ricercatore RTD secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR), Department of Mathematical Optimization, **Zuse Institute Berlin (ZIB)**, Berlino, Germania
- 06/2013 - 05/2014** **“Wissenschaftlicher Mitarbeiter”** (ricercatore postdottorale, corrispondente ad una posizione di Ricercatore RTD secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR), DFG Research Center MATHEON, **Technische Universität Berlin**, Berlino, Germania
- 11/2010 - 05/2013** **“Wissenschaftlicher Mitarbeiter”** (ricercatore postdottorale, corrispondente ad una posizione di Ricercatore RTD secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR), Department of Mathematical Optimization, **Zuse Institute Berlin (ZIB)**, Berlino, Germania
- 11/2009 - 10/2010** (Postdottorale da 01/2010) **Collaboratore di Ricerca**, Dipartimento di Informatica e Sistemistica, **Sapienza Università di Roma**, Roma, Italia
- 10/2008 - 08/2009** **Research Scholar**, Department of Industrial Engineering and Operations Research, **Columbia University in the City of New York**, New York, USA
- 10/2007 - 12/2007** **Collaboratore di Ricerca** con contratto di prestazione d’opera, **Centro di Eccellenza della Ricerca sulle Tecnologie del Software “RCOST”**, **Università degli Studi del Sannio** (Benevento)
- 11/2006 - 10/2009** **Assistente di Ricerca e Studente di Dottorato**, Dipartimento di Informatica e Sistemistica, **Sapienza Università di Roma**, Roma, Italia

Abilitazioni

- 2020** **Abilitazione all'esercizio della Professione di Ingegnere** (Esame di Stato, Prima Sessione - Anno 2020, sezione A - settore Industriale)
- 2018** **Abilitazione Scientifica Nazionale, Professore di Seconda Fascia**, Settore Concorsuale 09/H1 – "SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI" (valida dal 26/07/2018 AL 26/07/2027)
- 2016** **Qualification** come "**Maître de Conférences**" (corrispondente ad una posizione di **Professore Associato** secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR) in **Francia** per le Sezioni:
- 27 - Informatique (Informatica)
 - 61 - Génie informatique, automatique et traitement du signal (Ingegneria Informatica, Automatica e Teoria dei Segnali)

Premi

- 10/2019** **Honorable Mention - ISETT Best Paper Award 2019** per l'articolo "A Binary Linear Programming model for optimal parking slot management of urban carsharing services" (Proc. of the 2019 International Symposium on Emerging Trends in Transportation (ISETT), sponsored by the Transportation Research Board)
- 04/2018** **Vincitore dell' Evostar - EvoApplications Best Paper Award 2018** per l'articolo "A fast metaheuristic for the design of DVB-T2 Networks" (Proc. of EvoApplications 2018, Lecture Notes in Computer Science, Springer 2018)
- 02/2018** **Vincitore dell' ICIN Best Paper Award 2018** per l'articolo "Optimal Design of 5G Superfluid Networks: Problem Formulation and Solutions" (Proc. of the 21st Conference on Innovation in Clouds, Internet and Networks, IEEEExplore, 2018)
- 09/2017** **Vincitore dell' RNDM Best Paper Award 2017** per l'articolo "On survivable robust FSO network design" (Proc. of the 9th International Workshop on Resilient Networks Design and Modeling, IEEEExplore, 2017)
- 04/2016** **Candidato per il premio EvoStar - EvoApplications Best Paper Award 2016**
(7 articoli candidati tra i 75 articoli pubblicati nei Proceedings LNCS Springer)
per l'articolo "An (MI)LP-based Primal Heuristic for 3-Architecture Connected Facility Location in Urban Access Network Design" (Springer Lecture Notes in Computer Science, 2016)
- 11/2014** **Vincitore dell' INFORMS Section on Telecommunications Best Paper Award 2014** per l'articolo "GUB Covers and Power Indexed formulations for Wireless Network Design " (pubblicato nella rivista *Management Science*, 2014, e sponsorizzato da INFORMS - Institute for Operations Research and the Management Sciences, USA)
- 04/2014** **Vincitore dell' Evostar - EvoComNet Best Paper Award 2014** per l'articolo "A hybrid primal heuristic for Robust Multiperiod Network Design" (Proc. of EvoApplications, Lecture Notes in Computer Science, Springer 2014)
- 07/2012** **Vincitore del Premio Tesi di Dottorato Sapienza Università di Roma 2012** per la migliore tesi della Macroarea Scientifica D discussa negli anni 2009 e 2010 (sponsorizzato da *Sapienza Università Editrice*)
- 03/2012** **Vincitore dell' ESF-JSPS Excellence Award 2012 "Mathematics for Innovation: Large and Complex Systems"** (Chairs: Prof. V. Mehrmann; Prof. Y. Maeda), sponsorizzato dalla *European Science Foundation (ESF)* e dalla *Japan Society for the Promotion of Science (JSPS)*

05/2010 Vincitore dell' **INFORMS Doctoral Dissertation Award for Operations Research in Telecommunications 2010** per la mia Ph.D. Thesis "Pure 0-1 Programming approaches to Wireless Network Design" (sponsorizzato da INFORMS - Institute for Operations Research and the Management Sciences, USA)

09/2006 Vincitore del **Premio di Laurea Accenture 2004/05 per la migliore tesi in Ingegneria Gestionale**, per la mia Tesi di Laurea Specialistica: "Instradamento ottimo con vincoli di QoS in reti di telecomunicazioni"

Riconoscimenti

07/2021 Vincitore della selezione pubblica per un posto di **RTDB** per il settore concorsuale 09/H1 – SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI, settore scientifico-disciplinare ING-INF/05 – SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI presso il **Dipartimento di Ingegneria e Architettura** dell' **Università degli Studi di Trieste** (Trieste, Italia)
(Ho rinunciato alla posizione di vincitore, con l'effetto di far scorrere la graduatoria finale)

07/2021 Shortlisted per la selezione pubblica per un posto di **Professore Associato** per il settore concorsuale 09/H1 – SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI, settore scientifico-disciplinare ING-INF/05 – SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI presso il **Dipartimento di Ingegneria e Architettura** dell' **Università degli Studi di Trieste** (Trieste, Italia)

08/2021 Dichiarato idoneo per un posto di **RTDB** nella selezione pubblica per il settore concorsuale 09/H1 – SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI, settore scientifico-disciplinare ING-INF/05 – SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI presso il **Dipartimento di Ingegneria e Scienza dell'Informazione** dell' **Università degli Studi di Trento** (Trento, Italia)

2016-2019 Assegnatario di PEDR ("**Prime d'Encadrement Doctoral et de Recherche**" – Premio di Supervisione di Dottorato e di Ricerca) assegnato dal **Centre National de la Recherche Scientifique (CNRS)** per meriti di ricerca, supervisione ed impegno scientifico (bonus salariale annuale di 3500 EUR)

04/2016 Offerta per una posizione a tempo indeterminato di "**Maître Assistant**" in **Ingegneria Industriale** (corrispondente ad una posizione di "**Maître de Conférences**" francese, a sua volta corrispondente ad una posizione di **Professore Associato** secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR), a seguito della vittoria nel concorso internazionale di reclutamento.
École Nationale Supérieure des Mines de Nantes (Grande École d'Ingénieurs), Nantes, Francia
(OFFERTA NON ACCETTATA)

2016 Primo classificato nella graduatoria finale "admissibilité" del concorso internazionale di reclutamento per una **posizione di "Chargé de Recherche de Première Classe (CR1)" a tempo** (corrispondente ad una posizione di **Professore Associato** secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR).
INRIA (National Institute for Research in Digital Science and Technology) Lille - Nord Europe, Lille, Francia

2016 Inclusione nella *shortlist* per una **posizione di Maître de Conférences** (corrispondente ad una **posizione di Professore Associato** secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR) in **Computer Science** nei concorsi internazionali presso le università:

- **École Polytechnique**, Palaiseau-Parigi, Francia
- **Université Paris Dauphine**, Parigi, Francia

- 04/2015** **Invited Seminar** come Ricercatore Post-doc rappresentante dell'Area B "Networks" durante l'**International Scientific Board Evaluation Meeting** del **DFG Research Center MATHEON** (Berlino, Germania)
- 10/2014** **Inclusione nella shortlist** per una **Tenure Track Assistant Professorship** in Operations/Industrial Engineering nel Department of Operations della **University of Groningen** (Paesi Bassi)
- 11/2013** **Secondo Classificato nella graduatoria finale** per il reclutamento di un **Head of Research Group** (corrispondente ad una posizione di Assistant Professor) per la creazione del Gruppo di Ricerca "Optimization under Uncertainty" a **Technische Universität Berlin** (Berlino, Germania), finanziato dall'Einstein Center for Mathematics Berlin (Selection Committee: Prof. G. Kutyniok, Prof. R. Möhring, Prof. M. Skutella)
- 10/2006** **Borsa di Dottorato Triennale** erogata del **Ministero dell'Istruzione, dell'Università e della Ricerca (Italia)**, vinta tramite concorso per accesso al Dottorato di Ricerca in Ricerca Operativa, Sapienza Università di Roma (Roma, Italia)

Esperienza professionale

- 04/2013 - 03/2014** **Consulente,**
Quantek s.r.l., Roma, Italia.
Sviluppo di modelli e algoritmi di ottimizzazione matematica per decisioni in condizioni di *data uncertainty* per il design e management di *energy e power systems* per la multinazionale **Enel S.p.A.**
- 09/2009 - 10/2009** **Consulente,**
TeS Teleinformatica e Sistemi s.r.l., Roma, Italia.
Sviluppo di modelli e algoritmi di ottimizzazione matematica per il design di reti televisive basate sullo standard **Digital Video Broadcasting – Terrestrial (DVB-T)**
- 05/2007 - 06/2007** **Consulente,**
British Telecom Italia (BT Italia S.p.A.),
Technical Strategy & Innovation Unit, Roma, Italia.
Sviluppo di un software basato su C++ per il processamento di *Digital Terrain Maps* per l'elaborazione di dati relativi al design e management di reti cellulari wireless di 4a generazione.
- 03/2007 - 10/2009** **Consulente,**
Space Engineering S.p.A., - TeS Teleinformatica e Sistemi s.r.l., Roma, Italia.
Sviluppo di modelli e algoritmi di ottimizzazione matematica per il design di reti wireless (Progetto di Ricerca APICE – Algorithms for Integrated Planning and Control of Heterogeneous Wireless Networks).
- 09/2008 - 10/2008** **Consulente,**
Elsag Datamat S.p.A. (A Finmeccanica Company),
Computer Science Division, Roma, Italia.
Consulenza per lo sviluppo di un software per la pianificazione e ottimizzazione di reti wireless.
- 10/2006 - 04/2007** **Consulente Junior**
Information & Communications Technology
Accenture S.p.A., Roma, Italy.
- 01/2006 - 05/2009** **Socio Fondatore e Segretario**
Associazione Ingegneria Gestionale Roma Sapienza (AIGERS), Roma, Italia.
Amministrazione dell'associazione, fund raising, gestione delle relazioni con università, aziende e studenti.

Attività didattica presso Atenei in Italia e all'estero

10/2021

Offerta (accettata) per creare ed insegnare in qualità di Lecturer un nuovo corso semestrale di circa 60 ore nel Master of Science Program in Global Production Engineering - DIGITAL (nuovo programma di Master of Science internazionale con corsi interamente online che inizierà a settembre 2022).

Titolo provvisorio del corso: "Introduction to Machine Learning and Optimization" (sto attualmente preparando il materiale didattico e negoziando le caratteristiche del corso).

Faculty of Mechanical Engineering and Transport Systems, **Technische Universität Berlin, Berlino, Germania**

Anno Accademico
2021-2022

Lecturer dei seguenti corsi:

1. "Mathematical Methods for Engineering and Management",
Master of Science Program in Global Production Engineering
Faculty of Mechanical Engineering and Transport Systems, **Technische Universität Berlin, Berlino, Germania**
(corso parzialmente online - responsabile del corso e unico lecturer delle **64 ore di didattica**)
2. "Introduction to Optimization under Data Uncertainty",
Master of Science in Engineering of Complex Systems,
Faculty of Computer Sciences and Engineering, **Université de Technologie de Compiègne (UTC), Compiègne, France**
(responsabile e lecturer del corso di **32 ore**)

Anno Accademico
2020-2021

Lecturer dei seguenti corsi:

1. "Mathematical Methods for Engineering and Management",
Master of Science Program in Global Production Engineering,
Faculty of Mechanical Engineering and Transport Systems, **Technische Universität Berlin, Berlino, Germania**
(corso totalmente online a causa dell'emergenza Covid - responsabile del corso e unico lecturer delle **64 ore di didattica**)
2. "Introduction to Optimization under Data Uncertainty",
Master of Science in Engineering of Complex Systems,
Faculty of Computer Sciences and Engineering, **Université de Technologie de Compiègne (UTC), Compiègne, Francia**
(responsabile e lecturer del corso di **32 ore**)

Anno Accademico
2019-2020

Lecturer dei seguenti corsi:

1. "Mathematical Methods for Engineering and Management",
Master of Science Program in Global Production Engineering,
Faculty of Mechanical Engineering and Transport Systems, **Technische Universität Berlin, Berlino, Germania**
(corso parzialmente online - responsabile del corso e unico lecturer delle **64 ore di didattica**)

2. "Mathematical Methods for Engineering and Management",
Master of Science Program in Global Production Engineering
Faculty of Mechanical Engineering and Transport Systems, **Technische Universität Berlin, Berlino, Germania**
(corso parzialmente online - responsabile del corso e unico lecturer delle **64 ore di didattica**)
3. "Introduction to Optimization under Data Uncertainty",
Master of Science in Engineering of Complex Systems,
Faculty of Computer Sciences and Engineering, **Université de Technologie de Compiègne (UTC), Compiègne, France**
(responsabile e lecturer del corso di **32 ore**)

**Anno Accademico
2017-2018**

Lecturer dei seguenti corsi:

1. "Mathematical Methods for Engineering and Management",
Master of Science Program in Global Production Engineering,
Faculty of Mechanical Engineering and Transport Systems, **Technische Universität Berlin, Berlino, Germania**
(corso parzialmente online - responsabile del corso e unico lecturer delle **64 ore di didattica**)
2. "Mathematical Optimization for Civil Engineering",
Short Course per il Dottorato di Ricerca in Ingegneria Civile,
Dipartimento di Ingegneria, **Università Roma Tre, Roma, Italia**
(**7 ore di didattica**)

**Anno Accademico
2016-2017**

Lecturer dei seguenti corsi:

1. "Operations Research 3",
Faculty of Computer Sciences and Engineering, **Université de Technologie de Compiègne (UTC) Compiègne, Francia**
(lecturer per **20 ore di didattica** ("*Travaux dirigés*"))
2. "Mathematical Methods for Engineering and Management",
Master of Science Program in Global Production Engineering
Faculty of Mechanical Engineering and Transport Systems, **Technische Universität Berlin, Berlino, Germania**
(corso parzialmente online - responsabile del corso e unico lecturer delle **64 ore di didattica**)
3. "Robust Network Optimization"
Summer School on Network Performance Evaluation and Optimization,
Technische Universität Chemnitz, Chemnitz, Germania (3,5 ore)

**Anno Accademico
2015-2016**

Lecturer dei seguenti corsi:

1. "Mathematical Methods for Engineering and Management",
Master of Science Program in Global Production Engineering
Faculty of Mechanical Engineering and Transport Systems, **Technische Universität Berlin**
(responsabile del corso e unico lecturer delle **64 ore di didattica**)
2. "Design and Operation of Traffic and Telecommunication Networks" , Department of
Mathematics and Computer Science, **Freie Universität Berlin, Berlino, Germania**
(co-responsabile con il Prof. R. Borndörfer delle **64 ore di didattica e di 32 ore di sessioni di
esercizi**, lecturer di **32 delle 64 ore di didattica**)
3. "Linear Optimization",
Department of Mathematics and Computer Science, **Freie Universität Berlin**
(responsabile del corso e lecturer delle **56 ore di didattica e delle 28 ore di sessioni di
esercizi**)

**Anno Accademico
2009 - 2010**

Facoltà di Ingegneria, Sapienza Università di Roma (Roma, Italy),

1. **Tutor** del Corso "Laboratorio di Ottimizzazione Combinatoria" (Prof. C. Mannino e Prof. A. Sassano);
2. **Facoltà di Ingegneria, Sapienza Università di Roma**, Roma, Italia.
Tutor per i seguenti corsi delle Lauree Triennali e Specialistiche in Ingegneria:
 1. Gestione Aziendale (Prof. C. Leporelli);
 2. Ottimizzazione nella Gestione dei Progetti (Prof. C. Mannino);
 3. Sistemi di Servizio e Simulazione (Prof. M. Roma);
 4. Fondamenti di Automatica (Prof. L. Benvenuti);
 5. Fondamenti di Automatica (Prof. L. Farina).

**Spring Semester
2009**

Master of Science in Financial Engineering, Columbia University in the City of New York (New York, USA),

Teaching Assistant del corso "Applications Programming for Financial Engineers" (Prof. D. Bienstock).

**Anno Accademico
2007-2008**

Facoltà di Ingegneria, Sapienza Università di Roma, Roma, Italia.

Tutor per i seguenti corsi delle Lauree Triennali e Specialistiche in Ingegneria:

1. Laboratorio di Ottimizzazione Combinatoria (Prof. C. Mannino);
2. Ottimizzazione nella Gestione dei Progetti (Prof. C. Mannino);
3. Modelli e Algoritmi della Logistica (Prof. C. Mannino);
4. Modelli e Algoritmi della Logistica (Prof. A. Sassano);
5. Progetto e Ottimizzazione di Reti (Prof. P. Nobili);
6. Progetto e Ottimizzazione di Reti (Prof. A. Sassano).

**Anno Accademico
2006-2007**

Facoltà di Ingegneria, Sapienza Università di Roma, Roma, Italia.

Tutor per il seguente corso delle Lauree Triennali e Specialistiche in Ingegneria:

1. Ottimizzazione nella Gestione dei Progetti (Prof. C. Mannino);

Supervisione di attività di ricerca e di studenti

2017-2021	Co-Supervisor del Ph.D. Student Leonardo Zamberlan, Dottorato di Ricerca in Ingegneria Civile, Università Roma Tre, Roma, Italia (co-supervisionato con S. Carrese e E. Cipriani, Titolo della Tesi: "Simulation and Optimization of Sharing Mobility Services") Data dell'esame finale: 27/04/2021 (superato)
2017-in corso	Co-Supervisor del Ph.D. Student Chenghao Wang, Ph.D. Program dell'École doctorale n° 71 "Sciences pour l'Ingénieur", Université de Technologie de Compiègne, Francia (co-supervisionato con D. Nace, Titolo finale della Tesi: "Contribution to Robust Network Optimization") Data dell'esame finale: 30/09/2021 (superato)
2018-2021	Advisor dell'Assegnista di Ricerca Tommaso Giachetti, titolare di assegno di ricerca triennale riguardante lo sviluppo di modelli e algoritmi di simulazione e ottimizzazione per problemi di smart e shared mobility (Responsabile scientifico: Prof. Stefano Carrese, Dipartimento di Ingegneria, Università Roma Tre, Roma, Italia)
2018-in corso	Advisor della Ph.D. Student Antonella Nardin, Dottorato di Ricerca in Ingegneria Civile (Titolo della Tesi: "New regulatory and optimization approaches to smart vehicle sharing services") Università Roma Tre, Roma, Italia (Ph.D. Supervisor: Prof. Stefano Carrese, Dipartimento di Ingegneria, Università Roma Tre, Roma, Italia)
2020-2021	Supervisor di 5 M.Sc. Theses in Production Engineering a Technische Universität Berlin, Berlino, Germany
2015-2016	Supervisor del Post-doc Frank Pfeuffer a Zuse Institute Berlin (ZIB) (Berlino, Germania), in qualità di Head of Research Group del gruppo di ricerca "Mathematics of Telecommunications", di cui Pfeuffer era membro
2014-2016	Supervisor del Ph.D. Student Jonad Pulaj (Technische Universität Berlin, Berlino Germania) da me assunto come Research Fellow per il progetto di ricerca triennale "ROUAN - Robust Optimization of Urban Access Network", finanziato dall'Einstein Center for Mathematics Berlin (ECMath), Germania, di cui ero Principal Investigator
02/2015-07/2015	Supervisor della Ph.D. Student Michela Di Lullo (Ph.D. Program in Operations Research, Sapienza Università di Roma, Roma, Italia) durante il suo research visit a Zuse Institute Berlin (Berlino, Germania).
2014-2015	Co-Supervisor di B.Sc. e M.Sc. Theses in Mathematics and Computer Science at Freie Universität Berlin and Technische Universität Berlin, Berlino, Germania.
2012-2014	Co-Supervisor dei seguenti Research Assistant a Zuse Institute Berlin (ZIB) , Berlino, Germania: <ul style="list-style-type: none">• Jonatan Krolkowski (DFG Research Project "Multiperiod Network Design", Technical University Berlin, Berlino, Germania)• Fabian Mett (BMBF Research Project "Virtual Network Optimization", Freie University Berlin, Berlino, Germania)
2007-2009	Co-Relatore di numerose Tesi di Laurea Triennale e Specialistica in Ingegneria Gestionale presso Sapienza Università di Roma (Roma, Italia)

Progetti di ricerca (acquisizione e partecipazione)

- In qualità di Principal Investigator (PI):

2020:

1-year Research Project "ROSE - Research on Open SRv6 Ecosystem" (co-PI con Prof. L. Chiaraviglio e Prof. S. Salsano, CNIT (Consorzio nazionale interuniversitario per le telecomunicazioni) e Università di Roma Tor Vergata (Roma, Italia), finanziato dal **Cisco University Research Program Fund (USA)** (finanziamento: ca. 125.000 USD, durata: 1 anno)

2018:

1-year Research Project "Exploiting synergies of UAV networks and 5G" (co-PI con Prof. Enrico Natalizio, University of Technology of Compiègne, Compiègne, Francia), finanziato dal **Laboratory of Excellence LABEX MS2T "Control of Technological Systems-of-Systems", Université de Technologie de Compiègne, Francia** (finanziamento: ca. 35.000 EUR per coprire i costi di una posizione Post-doc per 1 anno)

2017:

3-year Research Project "New optimization approaches for the design of 5G Superfluid Networks" (co-PI with D. Nace, University of Technology of Compiègne, Compiègne, Francia), finanziato dal **Ministère de l'Enseignement Supérieur et de la Recherche** (MESR – Ministero Francese dell'Istruzione Superiore e della Ricerca), **Francia** (finanziamento: ca. 60.000 EUR per coprire i costi di una posizione di Ph.D. Student per 3 anni)

2014:

3-year Research Project "ROUAN - Robust Optimization of Urban Access Network" (co-PI with A. Werner, Zuse Institute Berlin, Berlino, Germania), finanziato dall'**Einstein Center for Mathematics Berlin (ECMath), Germania** (finanziamento: ca. 150.000 EUR per coprire i costi di una posizione di Research Fellow per 3 anni con inquadramento salariale tedesco di livello TV-L 13)

- In qualità di co-autore di proposte di progetto:

1. **3-year Research Project** "Virtual Network Optimization", finanziato dal **Bundesministerium für Bildung and Forschung** (BMBF - Ministero Federale Tedesco per l'Istruzione e la Ricerca) call for project (Fall 2012), presentato da A. Werner (Zuse Institute Berlin (ZIB), Berlino, Germania)

(Finanziamento: totale ca. 800.000 EUR, ca. 200.000 EUR per Zuse Institute Berlin)

NOTA: siccome il finanziamento del progetto avrebbe dovuto finanziare la mia posizione di Wissenschaftlicher Mitarbeiter presso lo Zuse Institute Berlin, non potevo figurare come co-Principal Investigator nella proposta

2. **1-year Research Project** "Robust Energy Offering under Market Equilibrium Constraints" finanziato da "**Gaspard Monge Program for Optimization, operations research and their interactions with Data Science (PGMO)**", (Call for Projects 2017), presentato da Prof. B. Fortz (Univ. Libre de Bruxelles, Belgio) (Finanziamento: ca. 10.000 EUR)
3. **1-year Research Project** "Robust Optimization for Data Mining Problems" finanziato da **Sapienza Università di Roma** (Call for Projects Spring 2013), presentato da Prof. R. Bruni (Finanziamento: ca. 2.500 EUR)
4. **2-year Cooperation Project** "Optimizing Railway Operations" con SINTEF Oslo, finanziato da **German Academic Exchange Service (DAAD)** call for project (Summer 2013), presentato da Prof. Dr. R. Borndörfer, Zuse Institute Berlin (ZIB) (Finanziamento: ca. 10.000 EUR)
5. **Progetto di Ricerca Europeo Triennale** "MOBINCITY - Smart Mobility In Smart City" (2012-2015, European Unions's 7th Framework Program), co-autore con il Prof. C. Mannino della parte di proposta riguardante approcci di network design e optimization da integrare nella parte di proposta di progetto del partecipante CRAT (Consorzio per la Ricerca nell'Automatica e nelle Telecomunicazioni, Roma) (Contributo UE: ca. 2.900.000 EUR, di cui ca. 265.000 EUR per il CRAT), 2010

- **Co-autore di proposte di progetto per bandi pubblici di gare di appalto (NOTA: le seguenti proposte non sono risultate vincitrici delle relative gare):**

1. Gara d'appalto pubblico per lo sviluppo di software per il progetto e la gestione di reti di distribuzione di energia elettrica (proposta presentata in collaborazione con l'azienda **QuanTek s.r.l.**, bando di gara di **Terna S.p.A.**), 2013;
2. Gara d'appalto pubblico per lo sviluppo di software di simulazione e ottimizzazione per il design e la gestione di reti televisive basate sullo standard Digital Video Broadcasting – Terrestrial (DVB-T) (proposta presentata in collaborazione con l'azienda **Space Engineering S.p.A.**, bando di gara AGCOM - **Autorità per le Garanzie nelle Comunicazioni**, 2010.

Oltre a partecipare alle attività di ricerca dei progetti elencati nella precedente sezione (escluso il Progetto di Ricerca Europeo MOBINCITY), ho partecipato ai seguenti progetti di ricerca:

- 2013-2014** "Wissenschaftlicher Mitarbeiter" (ricercatore postdottorale, corrispondente ad una posizione di Ricercatore RTD secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR) responsabile delle attività di ricerca svolte per il Progetto di Ricerca pluriennale "MATHEON B3 - Integrated Planning of Multi-layer Telecommunication Networks" (finanziato dal DFG Research Center MATHEON), **DFG Research Center MATHEON, Technische Universität Berlin** (Berlino, Germania)
- 2010-2013** "Wissenschaftlicher Mitarbeiter" (ricercatore postdottorale, corrispondente ad una posizione di Ricercatore RTD secondo la tabella allegata al D.M. 662 del 1 settembre 2016 del MIUR) responsabile delle attività di ricerca svolte per il Progetto di Ricerca triennale "ROBUKOM: Robust Communication Networks" (finanziato dal "German Federal Ministry for Education and Research (BMBF)", **Department of Mathematical Optimization, Zuse Institute Berlin (ZIB)** (Berlino, Germania)
- 2008-2009** Collaboratore alla Ricerca (con Contratto Co.Co.Co) per il Progetto di Ricerca APICE ("Algoritmi per la Pianificazione Integrata e Controllo di reti wireless Eterogenee", progetto MIUR n. 2878) presso il **Dipartimento di Informatica e Sistemistica "A. Ruberti", Università degli Studi di Roma "La Sapienza"** (Roma, Italia)
- 2009** Collaboratore alla Ricerca (con contratto di collaborazione occasionale) del **Dipartimento di Ingegneria, Università del Sannio** (Benevento, Italia) per attività di implementazione e sperimentazione di algoritmi di routing su reti MPLS nell'ambito della convezione "ITALTEL Progetto NAIN";
- 2007** Collaboratore alla Ricerca (con Contratto di Prestazione d'Opera) del **Centro di Eccellenza della Ricerca sulle Tecnologie del Software (RCOST)** (Benevento, Italia) per svolgere attività progettuali di studio e analisi di modelli e algoritmi di ottimizzazione per il routing nelle reti di telecomunicazione;

Research Grant personali

04/2020	UTC Mobility Grant Erogato da Université de Technologie de Compiègne (Compiègne, Francia) per la mia proposta di progetto finalizzata a stabilire nuove collaborazioni di ricerca sui temi delle reti 5G e del <i>Segment Routing</i> con l'Università di Roma Tor Vergata (Finanziamento: 5.000 EUR)
07/2019	Technical University Chemnitz Visiting Grant Erogato da Technische Universität Chemnitz (Chemnitz, Germania) per un research visit di 2 settimane presso la Chair of Communications Networks (Prof. T. Bauschert) (Finanziamento: ca. 1.500 EUR)
03/2015	COST Action TD 1207 Short Term Scientific Mission Grant Erogato da COST per un visiting presso Dr. C. D'Ambrosio (École Polytechnique, Palaiseau, France) Tema: "Robust Optimization for Uncertain Unit Commitment Problems with Quadratic Cost Function" (Finanziamento: ca. 1.000 EUR)
03/2014	EvoStar 2014 Grant (Granada, Spagna) Erogato per incentivare la partecipazione di giovani ricercatori alla conferenza (Granada, Spagna)
03/2014	Institute of Statistical Mathematics Grant Erogato per un research visit di 1 settimana presso l'Istituto (Tachikawa-Tokyo, Giappone) (Finanziamento: ca. 2.500 EUR)
07/2013	Mixed Integer Programming Workshop 2013 - Young Scholar Grant (Madison, USA) Erogato per incentivare la partecipazione di giovani ricercatori al Workshop
04/2013	FORMATH 2013 Grant, Erogato per un partecipare come invited speaker al Symposium FORMATH 2013 (Fukushima, Japan) ed effettuare un research visit presso il Japanese Institute of Statistical Mathematics, Tokyo, Japan (Finanziamento: ca. 2.500 EUR)
02/2012	European Science Foundation - Japan Society for the Promotion of Science Grant, Erogato per presentare il mio lavoro alla conferenza "Mathematics for Innovation" (Tokyo, Japan)
05/2011	EvoStar 2011 Grant Erogato per incentivare la partecipazione di giovani ricercatori alla conferenza (Torino, Italia)
05/2008	IPCO Summer School Ph.D. Student Grant, Erogato per incentivare la partecipazione di Ph.D. Students alla conferenza (Bertinoro, Italia)
10/2006	Borsa di Dottorato Triennale erogata del Ministero dell'Istruzione, dell'Università e della Ricerca (Italia) , vinta tramite concorso per accesso al Dottorato di Ricerca in Ricerca Operativa, Sapienza Università di Roma (Roma, Italia)

Pubblicazioni

Alla data 27/10/2021, risulato essere in possesso dei seguenti indicatori relativi alla mia produzione scientifica complessiva (dati recuperati dalla banca dati Scopus, **Scopus Author Identifier: 37123843000**):

- a) numero totale di lavori: **48**
- b) indice di Hirsch: **14**
- c) numero totale delle citazioni: **576**
- d) numero medio di citazioni per pubblicazione **12.00** (calcolato dividendo il numero totale delle citazioni per il numero totale di lavori registrati su Scopus);
- e) impact factor totale: **77.685**

NOTE:

- questo valore si riferisce ai 26 articoli inclusi nella lista "Articoli in rivista" fornita di seguito;
- il valore di impact factor è quello recuperato dal sito ufficiale di ogni rivista alla data 27/10/2021;

- f) impact factor medio per pubblicazione: **2.987**

NOTE:

- questo valore si riferisce ai 26 articoli inclusi nella lista "Articoli in rivista" fornita di seguito ed è stato calcolato dividendo l'impact factor totale sopra riportato per 26),
- il valore di impact factor è quello recuperato dal sito ufficiale di ogni rivista alla data 27/10/2021).

NOTA IMPORTANTE: A riguardo degli indicatori sopra riportati, evidenzio che, alla data 27/10/2021, il mio profilo Scopus con numero Scopus Author Identifier 37123843000 **NON INCLUDE** tutti i miei lavori indicizzati Scopus.

A causa di refusi nel mio cognome, non sono infatti correttamente inclusi i miei lavori presenti nel profilo:

D'Andreagiovanni, Fabio (Scopus Author Identifier 57201387622) includente 7 lavori con 50 citazioni totali, tra cui il contributo in atti di convegno dal titolo "When UAVs Ride a Bus: Towards Energy-efficient City-scale Video Surveillance", pubblicato nei Proceedings di IEEE INFOCOM 2018 (IEEE International Conference on Computer Communications), 2018, DOI: 10.1109/INFOCOM.2018.8485863, con 45 citazioni totali;

I miei indicatori Scopus corretti sarebbero quindi:

- numero totale di lavori registrati in Scopus: **55**
- indice di Hirsch: **15**
- numero totale di citazioni: **626**

In data 23/03/2021, ho presentato richiesta di fusione dei profili nel mio profilo Scopus con Identifier: **37123843000**

Articoli in rivista

1. L. Chiaraviglio, **F.D'Andreagiovanni**, W. Liu, J. A. Gutierrez, N. Blefari-Melazzi, K.R. Choo, M. Alouini, "Multi-Area Throughput and Energy Optimization of UAV-aided Cellular Networks Powered by Solar Panels and Grid", **IEEE Transactions on Mobile Computing** (IEEE), vol. 20, pp. 2427-2444, 2021, DOI: 10.1109/TMC.2020.2980834
2. M. Vidan, **F. D'Andreagiovanni**, H. Pandzic, "Individual Thermal Generator and Battery Storage Bidding Strategies Based on Robust Optimization", **IEEE Access** (IEEE), vol. 9, pp. 66829-66838, 2021, DOI: 10.1109/ACCESS.2021.3076872
3. S. Carrese, **F. D'Andreagiovanni**, T. Giacchetti, A. Nardin, L. Zamberlan, "A Beautiful Fleet: Optimal Repositioning in E-scooter Sharing Systems for Urban Decorum", **Transportation Research Procedia** (Elsevier), vol. 52, pp. 581-588, 2021, DOI: 10.1016/j.trpro.2021.01.069

4. **F. D'Andreagiovanni**, A. Nardin, S. Carrese,
"An Analysis of the Service Coverage and Regulation of E-Scooter Sharing in Rome (Italy)",
Accepted for publication in **Transportation Research Procedia** (Elsevier), 2021
5. S. Carrese, **F. D'Andreagiovanni**, T. Giacchetti, A. Nardin, L. Zamberlan,
"An optimization model and genetic-based matheuristic for parking slot rent optimization to carsharing",
Research in Transportation Economics (Elsevier) vol. 85, 100962 , 2020, DOI: 10.1016/j.retrec.2020.100962
6. R. Garroppo, M.G. Scutellà, **F. D'Andreagiovanni**,
"Robust green Wireless Local Area Networks: A matheuristic approach",
Journal of Network and Computer Applications, vol. 163, 102657, 2020, DOI: 10.1016/j.jnca.2020.102657
7. S. Carrese, **F. D'Andreagiovanni**, T. Giacchetti, A. Nardin, L. Zamberlan,
"An optimization model for renting public parking slots to carsharing services",
Transportation Research Procedia (Elsevier), vol. 45, pp. 499-506, 2020, DOI: 10.1016/j.trpro.2020.03.064
8. S. Carrese, **F. D'Andreagiovanni**, T. Giacchetti, A. Nardin, L. Zamberlan,
"Optimal rental and configuration of reserved parking for carsharing by Integer Linear Programming and Ant Colony Optimization",
Advances in Transportation Studies, vol. 3, pp. 63-76, 2019, DOI: 10.4399/97888255317946
9. L. Chiaraviglio, **F. D'Andreagiovanni**, K.R. Choo, F. Cuomo, S. Colonnese,
"Joint Optimization of Area Throughput and Grid-Connected Microgeneration in UAV-Based Mobile Networks",
IEEE Access 7, 69545-69558, 2019, DOI: 10.1109/ACCESS.2019.2920065
10. L. Chiaraviglio, **F. D'Andreagiovanni**, S. Rossetti, G. Sidoretti, N. Blefari-Melazzi, S. Salsano, C. Chiasserini, F. Malandrino,
"Algorithms for the design of 5G networks with VNF-based Reusable Functional Blocks",
Annals of Telecommunications 74 (9–10), 559–574, 2019, DOI: 10.1007/s12243-019-00722-w
11. S. Coniglio, **F. D'Andreagiovanni**, F. Furini,
"A lexicographic pricer for the fractional bin packing problem",
Operations Research Letters 47 (6), 622-628, 2019, DOI: 10.1016/j.orl.2019.10.011
12. **F. D'Andreagiovanni**, H. Lakhlef, A. Nardin,
"A matheuristic for joint optimal power and scheduling assignment in DVB-T2 networks",
Algorithms, MDPI, 13(1), 27, 2020, DOI: 10.3390/a13010027
13. D. Nace, M. Pioro, M. Poss, **F. D'Andreagiovanni**, I. Kalesnikau, M. Shehaj, A. Tomaszewski,
"An optimization model for robust FSO network dimensioning",
Optical Switching and Networking (Elsevier), vol. 32, pp. 25-40, 2019, DOI:10.1016/j.osn.2018.11.004
14. L. Chiaraviglio, **F. D'Andreagiovanni**, C. Canali, R. Lancellotti, M. Shojafar, N. Blefari Melazzi,
"An Approach to Balance Maintenance Cost and Electricity Consumption in Cloud Data Centers",
IEEE Transactions on Sustainable Computing 2(3), 274 - 288, 2018, DOI: 10.1109/TSUSC.2018.2838338
15. **F. D'Andreagiovanni**, R. Garroppo, M.G. Scutellà,
"Green Design of Wireless Local Area Networks by Multiband Robust Optimization",
Electronic Notes in Discrete Mathematics (Elsevier), 64, 225-234, 2018, DOI: 10.1016/j.endm.2018.01.024
16. **F. D'Andreagiovanni**, F. Mett, A. Nardin, J. Pulaj
"Integrating LP-guided variable fixing with MIP heuristics in the robust design of hybrid wired-wireless FTTx access networks",
Applied Soft Computing (Elsevier), vol. 61, pp. 1074-1087, 2017, DOI:10.1016/j.asoc.2017.07.018
17. A. Marotta, **F. D'Andreagiovanni**, A. Kassler, E. Zola,
"On the Energy Cost of Robustness for Green Virtual Network Function Placement in 5G Virtualized Infrastructures",
Computer Networks (Elsevier), vol. 125, pp. 64-75, 2017, DOI: 10.1016/j.comnet.2017.04.045

18. A. Marotta, E. Zola, **F. D'Andreagiovanni**, A. Kassler,
 "A fast robust optimization-based heuristic for the deployment of green virtual network functions",
Journal of Network and Computer Applications (Elsevier), vol. 95, pp. 42-53, 2017,
 DOI:10.1016/j.jnca.2017.07.014
19. **F. D'Andreagiovanni**, A. Nardin,
 "Towards the fast and robust optimal design of Wireless Body Area Networks",
Applied Soft Computing (Elsevier), vol. 37, pp. 971-982, 2015, DOI:10.1016/j.asoc.2015.04.037
20. T. Bauschert, C. Büsing, **F. D'Andreagiovanni**, A. Koster, M. Kutschka, U. Steglich,
 "Network Planning under Demand Uncertainty with Robust Optimization",
IEEE Communications Magazine, 52 (2) 178-185, 2014, DOI: 10.1109/MCOM.2014.6736760
21. **F. D'Andreagiovanni**
 Revisiting Wireless Network Jamming by SIR-based considerations and Multiband Robust Optimization
Optimization Letters (Springer), 9 (8), 1495–1510, 2015, DOI: 10.1007/s11590-014-0839-2
22. P. Dely, **F. D'Andreagiovanni**, A. Kassler
 Fair Optimization of Mesh-Connected WLAN Hotspots
Wireless Communications and Mobile Computing (Wiley), 15(5), 924–946, 2015, DOI: 10.1002/wcm.2393
23. **F. D'Andreagiovanni**, J. Krolikowski, J. Pulaj,
 "A fast hybrid primal heuristic for Multiband Robust Capacitated Network Design with Multiple Time Periods",
Applied Soft Computing (Elsevier) 26, 497-507, 2015, DOI: 10.1016/j.asoc.2014.10.016
24. **F. D'Andreagiovanni**, C. Mannino, A. Sassano
 GUB Covers and Power-Indexed Formulations for Wireless Network Design
Management Science 59 (1), 142-156, 2013, DOI: 10.1287/mnsc.1120.1571
Vincitore dell'INFORMS Section on Telecommunications Best Paper Award 2014
25. A. Bley, D. Karch, **F. D'Andreagiovanni**
 WDM Fiber Replacement Scheduling
Electronic Notes in Discrete Mathematics 41, 7276, 189-196, 2013, DOI: 10.1016/j.endm.2013.05.092
26. **F. D'Andreagiovanni**
 Pure 0-1 Programming approaches to Wireless Network Design
 4OR: A Quarterly Journal of Operations Research, 2012 , DOI: 10.1007/s10288-011-0162-z
Ph.D. Thesis vincitrice dei premi:
 - **INFORMS Section on Telecommunications Doctoral Dissertation Award 2010**
 - **Premio Tesi di Dottorato Sapienza Università 2012**

Contributi in atti di convegno (refereed conference proceedings)

1. S. Carrese, **F. D'Andreagiovanni**, A. Nardin, T. Giacchetti, L. Zamberlan,
 "Seek & Beautify: integrating UAVs in the optimal beautification of e-scooter sharing fleets",
Accettato per la pubblicazione nei Proceedings of IEEE MT-ITS 2021 - 7th International IEEE Conference on Models and Technologies for Intelligent Transportation Systems (IEEE Xplore), 2021
2. **F. D'Andreagiovanni**, H. Lakhlef, A. Nardin,
 "A Robust Optimization Approach for Designing FTTx Networks Integrating Free Space Optics under Weather Uncertainty",
ACM Q2SWinet 2020 - Proceedings of the 16th ACM Symposium on QoS and Security for Wireless and Mobile Networks, pp. 7–13, 2020, DOI: 10.1145/3416013.3426448
3. H. Lakhlef, A. Bouabdallah, **F. D'Andreagiovanni**,
 "A Memory-efficient Group Key Management for Communicating Things",
ACM Q2SWinet 2020 - Proceedings of the 16th ACM Symposium on QoS and Security for Wireless and Mobile Networks, pp. 29–35, 2020, DOI: 10.1145/3416013.3426447

4. S. Ismail, **F. D'Andreagiovanni**, H. Lakhlef, Y. Imine,
 "Recent Advances on 5G Resource Allocation Problem using PD-NOMA",
Proceedings of the 2020 International Symposium on Networks, Computers and Communications (ISNCC),
 IEEE Xplore, 2020, DOI: 10.1109/ISNCC49221.2020.9297208
5. H. Lakhlef, G. Jaber, A. Bouabdallah, **F. D'Andreagiovanni**, A. Lounis,
 "Distributed Time Slots Assignment Protocol in Dynamic Networks",
Proceedings of the 2020 IEEE Symposium on Computers and Communications (ISCC), IEEE Xplore, 2020, DOI:
 10.1109/ISCC50000.2020.9219697
6. L. Chiaraviglio, **F. D'Andreagiovanni**, F. Idzikowski, A. V. Vasilakos,
 "Minimum cost design of 5G networks with UAVs, tree-based optical backhauling, microgeneration and
 batteries",
Proceedings of the 21st International Conference on Transparent Optical Networks - ICTON2019, IEEE Xplore,
 2019, DOI: 10.1109/ICTON.2019.8840395
7. T. Bauschert, **F. D'Andreagiovanni**, A. Kassler, C. Wang,
 "A Matheuristic for Green and Robust 5G Virtual Network Function Placement",
Applications of Evolutionary Computation - EvoApplications 2019, Springer Lecture Notes in Computer Science,
 vol. 11454, 430-438, 2019, DOI: 10.1007/978-3-030-16692-2_29
8. C. Wang, **F. D'Andreagiovanni**, D. Nace,
 "Solving a resource allocation problem in RFB-based 5G wireless networks",
Proceedings of BALKANCOM 2019 (International Balkan Conference on Communications and Networking), 2019
9. A. Trotta, **F. D'Andreagiovanni**, M. Di Felice, E. Natalizio, K. Chowdhury,
 "When UAVs ride a bus: Towards energy-efficient city-scale video surveillance",
IEEE INFOCOM 2018 (IEEE International Conference on Computer Communications), IEEE Xplore, 2018, DOI:
 10.1109/INFOCOM.2018.8485863
10. A. Baumgartner, T. Bauschert, **F. D'Andreagiovanni**, V. Reddy,
 "Towards Robust Network Slice Design Under Correlated Demand Uncertainties",
IEEE ICC 2018 (IEEE International Conference on Communications), IEEE Xplore, 2018, DOI:
 10.1109/ICC.2018.84226182018
11. L. Chiaraviglio, **F. D'Andreagiovanni**, G. Siderotti, N. Blefari Melazzi, S. Salsano,
 "Optimal Design of 5G Superfluid Networks: Problem Formulation and Solutions",
Proc. of ICIN 2018 (21st Conference on Innovation in Clouds, Internet and Networks), DOI:
 10.1109/ICIN.2018.8401628, IEEE Xplore, 2018
 Premiato con l' ICIN Best Paper Award 2018
12. **F. D'Andreagiovanni**, A. Nardin,
 "A fast metaheuristic for the design of DVB-T2 networks",
EvoApplications 2018: Applications of Evolutionary Computation, Springer Lecture Notes in Computer Science
 vol. 10784, pp. 141-155, 2018, DOI: 10.1007/978-3-319-77538-8_11
 Premiato con l' EvoStar - EvoApplications Best Paper Award 2018
13. L. Amorosi, L. Chiaraviglio, **F. D'Andreagiovanni**, N. Blefari Melazzi
 "Energy-efficient Mission Planning of UAVs for 5G Coverage in Rural Zones",
Proc. of IEEE ICEE 2018 (IEEE International Conference on Environmental Engineering), IEEE Xplore, DOI:
 10.1109/EE1.2018.8385250 , 2018
14. **F. D'Andreagiovanni**, H. Lakhlef, A. Nardin,
 "A Hybrid MIP-based Heuristic for the Optimal Design of DVB-T2 Networks",
IEEE ATC 2018 (15th IEEE International Conference on Advanced and Trusted Computing), IEEE Xplore, DOI:
 10.1109/SmartWorld.2018.00265, 2018
15. **F. D'Andreagiovanni**, D. Nace, M. Pioro, M. Poss, M. Shehaj, A. Tomaszewski,
 "On survivable robust FSO network design",

Proc. of RNDM 2017 (9th International Workshop on Resilient Networks Design and Modeling), IEEE Xplore, IEEE, 2017, DOI: 10.1109/RNDM.2017.8093027

Premiato con l' RNDM 2017 Best Paper Award

16. **F. D'Andreagiovanni**, D. Nace, A. Nardin, E. Natalizio,
"Robust relay node placement in body area networks by heuristic min-max regret"
Proc. of BALKANCOM 2017 (International Balkan Conference on Communications and Networking), 2017
17. **F. D'Andreagiovanni**, R. Garroppo, M.G. Scutellà,
"Power Savings with Data Rate Guarantee in Dense WLANs",
Proc. of MoWNet 2017 (International Conference on Selected Topics in Mobile and Wireless Networking), IEEE Xplore, 2017, DOI: 10.1109/MoWNet.2017.8045946
18. **F. D'Andreagiovanni**, A. Nardin, E. Natalizio,
"A fast ILP-based Heuristic for the robust design of Body Wireless Sensor Networks",
In: G. Squillero and K. Sim (Eds.) **EvoApplications 2017, Part I, Springer Lecture Notes in Computer Science** 10199, 1–17, 2017, DOI: 10.1007/978-3-319-55849-3_16
19. **F. D'Andreagiovanni**, A. Gleixner,
"Towards an accurate solution of wireless network design problems",
Proceedings of the 2016 International Symposium on Combinatorial Optimization (ISCO),
Springer Lecture Notes in Computer Science, vol. 9849, 135-147, 2016, DOI: 10.1007/978-3-319-45587-7_12
20. **F. D'Andreagiovanni**, G. Caire,
"An Unconventional Clustering Problem: User Service Profile Optimization",
Proc. of the 2016 IEEE International Symposium on Information Theory (ISIT), IEEE Xplore, DOI: 10.1109/ISIT.2016.7541420
21. **F. D'Andreagiovanni**, F. Mett, J. Pulaj,
"Towards the integration of Power-Indexed Formulations in Multi-architecture Connected Facility Location Problems for the optimal design of hybrid fiber-wireless access networks",
Proc. of the "5th Student Conference on Operational Research (SCOR 2016)", 2016 , OASlcs, Schloss Dagstuhl, DOI: 10.4230/OASlcs.SCOR.2016.8
22. V. H. Tanzil, P. Farkas, **F. D'Andreagiovanni**, R. Freund,
"Cost Optimized Planning of Fixed-Wireless Hybrid Access Networks",
Proc. of the 10th ITG Conference on Broadband Coverage in Germany, ISBN: 978-3-8007-4193-9 IEEE Xplore, 2016
23. **F. D'Andreagiovanni**, F. Mett, J. Pulaj,
"An (MI)LP-based Primal Heuristic for 3-Architecture Connected Facility Location in Urban Access Network Designs",
Proc. of EvoStar - EvoApplications 2016 Vol. 9597, pp. 283-298, Springer Lecture Notes in Computer Science, Springer, 2016, DOI: 10.1007/978-3-319-31204-0_19
Finalista dell'EvoApplications Best Paper Award 2016 (7 candidati tra i 75 paper della conferenza)
24. **F. D'Andreagiovanni**, J. Krolkowski, J. Pulaj
"A hybrid primal heuristic for Robust Multiperiod Network Design",
Applications of Evolutionary Computation, Springer Lecture Notes in Computer Science 8602, pp. 15-26, 2014, DOI: 10.1007/978-3-662-45523-4_2
Premiato con l'EvoStar-EvoComNet Best Paper Award 2014
25. A. Zakrewska, **F. D'Andreagiovanni**, S.R. Ruepp, M.S. Berger,
"Biobjective Optimization of Radio Access Technology Selection and Resource Allocation in Heterogeneous Wireless Networks",
Proceedings of WiOpt-RAWNET/WNC3 2013, 11th International Symposium on Modeling & Optimization in Mobile, Ad Hoc & Wireless Networks (WiOpt) 2013 - 9th International Workshop on Resource Allocation, Cooperation and Competition in Wireless Networks, IEEE, pp. 652-658, Tsukuba, Japan, 2013, Electronic ISBN: 978-3-901882-54-8

26. A. Bley, **F. D'Andreagiovanni**, D. Karch
 "Scheduling technology migration in WDM Networks",
Proc. of the 14th ITG Symposium on Photonic Networks, pp. 1-5, ISBN: 978-3-8007-3503-7, 2013
27. **F. D'Andreagiovanni**, A. Raymond,
 Multiband Robust Optimization and its Adoption in Harvest Scheduling,
FORMATH, Workshop on Forest Resources and Mathematical Modelling, 2013, Fukushima, Japan, DOI: 10.15684/formath.13.97
28. C. Büsing, **F. D'Andreagiovanni**, A. Raymond,
 "0–1 Multiband Robust Optimization"
Operations Research Proceedings 2013, pp. 89-95, Springer, 2014, DOI: 10.1007/978-3-319-07001-8_13
29. C. Büsing, **F. D'Andreagiovanni**,
 "New results about multi-band uncertainty in Robust Optimization",
Proceedings of SEA 2012, 11th Symposium on Experimental Algorithms, Springer Lecture Notes in Computer Science 7276, pp. 63–74, Bordeaux, France, 2012, DOI: 10.1007/978-3-642-30850-5_7
30. C. Büsing, **F. D'Andreagiovanni**,
 "A new theoretical framework for Robust Optimization under multi-band uncertainty",
Operations Research Proceedings 2012, pp. 115-121, Springer, 2013, DOI: 10.1007/978-3-319-00795-3_17
31. **F. D'Andreagiovanni**,
 "A hybrid exact-ACO algorithm for the joint scheduling, power and cluster assignment in cooperative wireless networks",
Proceedings of BIONETICS 2012, Springer Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering 134, pp. 3-17, Springer, 2014, DOI: 10.1007/978-3-319-06944-9_1
32. **F. D'Andreagiovanni**, C. Mannino, A. Sassano,
 "Negative Cycle Separation in Wireless Network Design",
Proc. of INOC 2011, 5th International Conference on Network Optimization, Springer Lecture Notes in Computer Science 6701, pp. 51–56, Springer, 2011, DOI: 10.1007/978-3-642-21527-8_7
33. **F. D'Andreagiovanni**,
 "On Improving the Capacity of Solving Large-scale Wireless Network Design Problems by Genetic Algorithms",
Proc. of EvoApplications 2011, Springer Lecture Notes in Computer Science 6625, pp. 11–20, Torino, Italy, 2011, DOI: 10.1007/978-3-642-20520-0_2
34. A. Bley, **F. D'Andreagiovanni**, A. Hanemann,
 "Robustness in Communication Networks: Scenarios and Mathematical Approaches"
Proc. of the 12th ITG Symposium on Photonic Networks, Paper 21, pp. 1-8, 2011, ISBN:978-3-8007-3346-0

Monografie

1. **F. D'Andreagiovanni**,
 "New perspectives on Wireless Network Design - Strong, stable and robust 0-1 models by Power Discretization",
 Collana Studi e Ricerche, **Sapienza Università Editrice**, 2012, ISBN: 978-88-95814-79-7

Contributi in volume

1. **F. D'Andreagiovanni**, C. Mannino,
 "An Optimization Model for WiMAX Network Planning",
WiMAX Network Planning and Optimization, (ed. Y. Zhang), Chapt. 18, pp. 369-386, Auerbach Publications, 2009

Tesi di Dottorato

1. **F. D'Andreagiovanni**,
 "Pure 0-1 programming approaches to Wireless Network Design",
Tesi di Dottorato in Ricerca Operativa, Sapienza Università di Roma, Roma, Italia, 2010

Premiata con:

- **l' INFORMS Doctoral Dissertation Award for Operations Research in Telecommunications 2010**
- **il Premio Tesi di Dottorato Sapienza Università di Roma 2012**

1. Responsabilità editoriali:

- Da 07/2021, **Associate Editor** della rivista **Soft Computing (Impact Factor: 3.643)** (Springer)
- Da 01/2020, **Membro dell'Editorial Board** della rivista **Applied Soft Computing (Impact Factor: 6.725)** (Elsevier)
- Da 08/2020, **Membro dell'Editorial Board** della rivista **International Telecommunications Union Journal on Future and Evolving Technologies (ITU J-FET)** (Editor-in-Chief: Ian F. Akyildiz (International Telecommunications Union - ITU))
- Da 05/2020, **Membro dell'Editorial Board** della rivista **Frontiers in Communications and Networks (Chief Editor: Mohamed-Slim Alouini)** (Frontiers)
- Da 12/2019, **Membro dell'Editorial Board** della rivista **Telecom (MDPI)**
- Da 02/2020, **Topic Editor** della rivista **Algorithms (MDPI)**
- **Volume Editor** dei seguenti volume di **Lecture Notes in Computer Science (Springer)**:
 1. Springer LNCS volume n. 10784 (2018): "Applications of Evolutionary Computation - 21st International Conference, EvoApplications 2018 Parma, Italy, April 4-6, 2018 Proceedings"
 2. Springer LNCS volume n. 10199 (2017): "Applications of Evolutionary Computation - 20th European Conference, EvoApplications 2017 Amsterdam, The Netherlands, April 19-21, 2017 Proceedings, Part I"
 3. Springer LNCS volume n. 10200 (2017): "Applications of Evolutionary Computation - 20th European Conference, EvoApplications 2017 Amsterdam, The Netherlands, April 19-21, 2017 Proceedings, Part II"

2. Responsabilità in Scientific Society:

- **2016-2020: Member of the Council** dell'**INFORMS Section on Telecommunications & Network Analytics** (INFORMS - Institute for Operations Research and the Management Sciences, USA)

3. Partecipazione al Collegio dei Docenti di Dottorati di Ricerca:

- **Dal 2020:** Membro del Collegio dei Docenti del Dottorato di Ricerca in Ingegneria Civile, **Università Roma Tre**, Roma, Italia
- **07-09/2021: Membro della Commissione** del concorso per l'ammissione al Dottorato di Ricerca in Ingegneria Civile, **Università Roma Tre**, Roma, Italia (XXXVII ciclo formativo – A.A. 2021 /2022)

4. Partecipazione a giurie di valutazione di Tesi di Dottorato in Italia e Ph.D. Thesis all'estero

- **2021: membro della Giuria**, Ph.D. Program dell'École doctorale n° 71 "Sciences pour l'Ingénieur", **Université de Technologie de Compiègne** (Francia), Tesi: "Contribution to Robust Network Optimization", candidato: C. Wang
- **2019: valutatore esterno, Dottorato in Informatica e Automazione, Università Roma Tre** (Roma), Tesi: "Rail Yield Management. Trenitalia Case", candidato: A. Berto
- **2018: membro della Giuria**, Ph.D. Program dell'École doctorale n° 71 "Sciences pour l'Ingénieur", **Université de Technologie de Compiègne** (Francia), Tesi: "Adaptive solutions for data sharing in vehicular networks", candidato: H.P. de Moraes
- **2017: membro della Giuria**, Ph.D. in Business Administration, **ESSEC Business School** (Parigi, Francia), Tesi: "Robust Optimization for Discrete structures and Non-linear impact of Uncertainty", candidato: J.C. Espinoza

5. Workshop Chair and Organizer:

- **MaLeN 2020** - Workshop on Machine Learning and Optimization for Communications Networks (workshop della 26th Conference of the Open Innovations Association FRUCT **2020**, sponsored by IEEE, Trento, Italia)
- **OptiComNet 2019** - Workshop on Optimization in Computing and Networking (workshop della 4th IEEE International Conference on Computing Communication and Security - **IEEE ICCCS-2019**, Roma, Italia)

6. Stream Chair and Organizer in International Conferences:

- **Chair** dello Stream on Telecommunications, **EURO 2019** (Dublino, Irlanda)
- **Chair** dello Stream on Telecommunications, **EURO 2018** (Valencia, Spagna)
- **Co-Chair** di **EvoStar - EvoComNet 2018** (Parma, Italia)

- **Co-Chair** dello Stream on Telecommunications, **IFORS 2017** (Quebec City, Canada)
- **Co-Chair** di **EvoStar - EvoComNet 2017** (Amsterdam, Paesi Bassi)
- **Cluster Co-Chair** dell'INFORMS Technical Section on Telecommunications Cluster at the **INFORMS Annual Meeting 2016** (Nashville, USA)
- **Cluster Co-Chair** dell'INFORMS Technical Section on Telecommunications Cluster at the **INFORMS Annual Meeting 2015** (Philadelphia, USA)

7. Publication Chair:

- **BALKANCOM 2018** - Second International Balkan Conference on Communications and Networking (Podgorica, Montenegro)

8. Publicity Chair:

- **WiMob 2020** - 16th International Conference on Wireless and Mobile Computing, Networking and Communications (Thessaloniki, Greece)

9. Valutatore di proposte di progetto di ricerca:

- 2018: invitato a valutare proposta di progetto per **FONDECYT (Chilean National Fund for Scientific and Technological Development)**, Cile

10. Valutatore di produzioni scientifiche accademiche nazionali:

- 06/2021: invitato a svolgere il ruolo di **External Referee** per l'ANVUR (Agenzia nazionale di valutazione del sistema universitario) per la **VQR 2015-2019**, Italia

11. TECHNICAL PROGRAM COMMITTEE MEMBER in conferenze internazionali:

1. **DRCN 2022 - 18th International Conference on the Design of Reliable Communication Networks** (Vilanova, Spain)
2. **ICIN 2021** (25th Conference on Innovation in Clouds, Internet and Networks) (Paris, France)
3. **IEEE IHTC 2021** (2021 IEEE International Humanitarian Technology Conference) (virtual)
4. **AICCSA 2021 - 18th ACS/IEEE International Conference on Computer Systems and Applications** (Tangier, Morocco)
5. **BALKANCOM 2021 - 4th International Balkan Conference on Communications and Networking**, (Novi Sad, Serbia)
6. **DRCN 2021 - 17th International Conference on the Design of Reliable Communication Networks** (Milano, Italy)
7. **Student Workshop - ACM GECCO 2021** (Genetic and Evolutionary Computation Conference) (Lille, France)
8. **SoSE 2021** - 16th Annual Conference on System of Systems Engineering (SoSE), (virtual conference)
9. **ICIN 2021 (24th Conference on Innovation in Clouds, Internet and Networks)** (Paris, France)
10. **INOC 2021 - International Network Optimization Conference** (Aachen, Germany)
11. **WISARN 2021 – IEEE INFOCOM Workshop (14th International Workshop on Wireless Sensor, Robot and UAV Networks)**, (virtual conference)
12. **PDEIM 2021 - ACM GECCO Workshop** - ACM Workshop on Parallel and Distributed Evolutionary Inspired Methods (Lille, France)
13. **EuCNC 2021 - 30th European Conference on Network and Communications**, (Porto, Portugal)
14. **DalS 2021 - IEEE ISCC Workshop** (1st IEEE International Workshop on Distributed and Intelligent Systems, in conjunction with the 26th IEEE Symposium on Computers and Communications, Athens, Greece)
15. **EvoStar - EvoApplications 2021** (Seville, Spain)
16. **ITNAC 2021 – 31st International Telecommunication Networks and Application Conference**, (Sydney, Australia)
17. **IWROV 2021- 2021 International Workshop on Remote Operated Vehicle** (Singapore)
18. **IEEE ISCI 2020 - 8th IEEE International Conference on Smart City and Informatization** (Guangzhou, China)
19. **IEEE INFOCOM 2020 - IEEE Conference on Computer Communications** (Beijing, China)
20. **DRCN 2020 - 16th International Conference on the Design of Reliable Communication Networks** (Milano, Italy)
21. **ICIN 2020 (23rd Conference on Innovation in Clouds, Internet and Networks)** (Paris, France)
22. **RNDM 2020** - 12th International Workshop on Resilient Networks Design and Modeling (Edmonton, Canada)

23. **PDEIM 2020 - ACM GECCO Workshop** - ACM Workshop on Parallel and Distributed Evolutionary Inspired Methods (Cancun, Mexico)
24. **EuCNC 2020 - 29th European Conference on Network and Communications**, (Dubrovnik, Croatia)
25. **BIOMA 2020 (9th International Conference on Bioinspired Optimisation Methods and Their Applications)** (Bruxelles, Belgium)
26. **ITNAC 2020 – 30th International Telecommunication Networks and Application Conference**, (Melbourne, Australia)
27. **ICCCS-2020**, 5th International Conference on Computing, Communication and Security (Patna, India)
28. **EvoStar - EvoApplications 2020** (Valencia, Spain)
29. **BALKANCOM 2020 - 4th International Balkan Conference on Communications and Networking**, (Novi Sad, Serbia)
30. **IntelliSys 2020 (Intelligent Systems Conference 2020)** (Amsterdam, Netherlands)
31. **ICSAI 2020 (7th International Conference on Systems and Informatics)** (Jiaxing, China)
32. **VEHITS 2020 (6th International Conference on Vehicle Technology and Intelligent Transport Systems)** (Prague, Czech Republic)
33. **FTC 2020 (Future Technologies Conference 2020)** (Vancouver, Canada)
34. **TMA Conference 2019 - Network Traffic Measurement and Analysis Conference** (Paris, France)
35. **IEEE ICCCS 2019** - 4th IEEE International Conference on Communications, Computing and Security (*Roma, Italy*)
36. **INOC 2019 - International Network Optimization Conference** (Avignon, France)
37. **SMILING 2019 – IEEE INFOCOM Workshop (Workshop on Sustainable networking through Machine Learning and Internet of things)**, (Paris, France)
38. **DRCN 2019 - 15th International Conference on the Design of Reliable Communication Networks** (Coimbra, Portugal)
39. **EuCNC 2019 - 28th European Conference on Network and Communications**, (Valencia, Spain)
40. **ICIN 2019 (22nd Conference on Innovation in Clouds, Internet and Networks)** (Paris, France)
41. **RNDM 2019** - 11th International Workshop on Resilient Networks Design and Modeling (Nicosia, Cyprus)
42. **ITNAC 2019 - 29th International Telecommunication Networks and Application Conference**, (Auckland, New Zealand)
43. **BALKANCOM 2019 - Third International Balkan Conference on Communications and Networking**, (Skopje, Macedonia)
44. **WISARN 2018 – IEEE INFOCOM Workshop (Wireless Sensor, Robot and UAV Networks)**, (Honolulu, Hawaii)
45. **RoSe 2018 – IEEE PIMRC Workshop** (IEEE 29th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications, Workshop WS-10 on "Wireless Robots and Sensors Networks for Railway Systems"), (Bologna, Italy)
46. **PDEIM 2018 - ACM GECCO Workshop** - ACM Workshop on Parallel and Distributed Evolutionary Inspired Methods (Kyoto, Japan)
47. **RNDM 2018** - 10th International Workshop on Resilient Networks Design and Modeling (Longyearbyen - Svalbard, Norway)
48. **GECDSRM Workshop at ACM GECCO 2018** - ACM Workshop on Genetic and Evolutionary Computation in Defense, Security and Risk Management - SecDef (Kyoto, Japan)
49. **IEEE ATC 2018** - 15th IEEE International Conference on Advanced and Trusted Computing (Guangzhou, China)
50. **BELIEF 2018** - 5th International Conference on Belief Functions (Compiègne, France)
51. **SMPS 2018** - 9th International Conference on Soft Methods in Probability and Statistics (Compiègne, France)
52. **IEEE SoSe – 13th System of Systems Engineering Conference (SoSe 2018)**, (Paris, France)
53. **BALKANCOM 2018 - Second International Balkan Conference on Communications and Networking**, (Podgorica, Montenegro)
54. **EuCNC 2018 - 27th European Conference on Network and Communications**, (Ljubljana, Slovenia)
55. **MEDPOWER 2018 - 11th Mediterranean Conference on Power Generation, Transmission, Distribution and Energy Conversion**, (Dubrovnik, Croatia)
56. **TMA Conference 2018 - Network Traffic Measurement and Analysis Conference**, (Vienna, Austria)

57. **ITNAC 2018 - 28th International Telecommunication Networks and Applications Conference** (Sydney, Australia)
58. **META 2018 - 7th International Conference on Metaheuristics and Nature Inspired Computing**, (Marrakech, Morocco)
59. **ICCS 2018 - International Conference on Computational Science**, (Wuxi, China)
60. **Soft 2017 - ITC Workshop - Soft5 2017 Workshop** at the **29th International Teletraffic Congress**, (Genova, Italy)
61. **PDEIM 2017 - ACM GECCO Workshop - ACM Workshop on Parallel and Distributed Evolutionary Inspired Methods** (Berlin, Germany)
62. **Workshop on Medical and HealthCare Applications of Evolutionary Computation** at **IEEE CEC 2017 - Congress on Evolutionary Computation** - (San Sebastián, Spain)
63. **INOC 2017 - International Network Optimization Conference** (Lisbon, Portugal)
64. **EvoStar - EvoApplications 2017** (Amsterdam, the Netherlands)
65. **ITC 2016 - 28th International Teletraffic Congress** (Würzburg, Germany)
66. **USRR 2016 - 4th International Workshop on Understanding the inter-play between Sustainability, Resilience, and Robustness in networks**, Halmstad, Sweden
67. **EvoStar - EvoApplications 2016** (Porto, Portugal)
68. **BIONETICS 2012** (Conference on Bio-Inspired Models of Network, Information, and Computing System, Lugano, Switzerland)

12. Session Chair in numerose conferenze internazionali (per esempio AIRO, BIONETICS, EvoStar, IEEE ICCCS, ISMP, MoWNeT, ROADef)

13. Reviewer per le seguenti riviste e conferenze scientifiche:

1. ACM Computing Surveys (ACM)
2. Ad Hoc Networks (Elsevier)
3. Algorithms (MDPI)
4. Annals of Operations Research (Springer)
5. Annals of Telecommunications (Springer)
6. Applied Soft Computing (Elsevier)
7. IEEE CEC - Congress on Evolutionary Computation (IEEE conference)
8. Computer Communications (Elsevier)
9. Computer Networks (Elsevier)
10. Computers & Operations Research (Elsevier)
11. Discrete Applied Mathematics (Elsevier)
12. Discrete Optimization (Elsevier)
13. Energies (MDPI)
14. EURO Journal on Computational Optimization (Springer)
15. European Journal of Operational Research (Elsevier)
16. Expert Systems with Applications (Elsevier)
17. ACM GECCO - The Genetic and Evolutionary Computation Conference (ACM conference)
18. IEEE Communications Magazine (IEEE)
19. IEEE INFOCOM (IEEE)
20. IEEE Transactions on Cognitive Communications and Networking (IEEE)
21. IEEE Transactions on Green Communications and Networking (IEEE)
22. IEEE Transactions on Mobile Computing (IEEE)
23. IEEE Transactions on Network and Service Management (IEEE)
24. IEEE Transactions on Parallel and Distributed Computing (IEEE)
25. Information and Computation (Elsevier)
26. Information Sciences (Elsevier)
27. IFIP Networking (IFIP conference)
28. International Journal of Interdisciplinary Telecommunications and Networking (IGI)
29. IPCO - Conference on Integer Programming and Combinatorial Optimization (top tier conference)
30. ISST - IEEE International Symposium on Telecommunication Technologies (IEEE conference)
31. ITC International Teletraffic Conference (conference)
32. ITSC - IEEE Intelligent Transportation Systems Conference (IEEE conference)
33. Journal of Experimental & Theoretical Artificial Intelligence (Taylor & Francis)

34. Journal of Network and Computer Applications (Elsevier)
35. JESTECH - Engineering Science and Technology, an International Journal (Elsevier)
36. Knowledge and Information Systems (Springer)
37. Omega (Elsevier)
38. Operations Research (INFORMS)
39. Operation Research Letters (Elsevier)
40. OSA/IEEE Journal of Optical Communication and Networking (IEEE)
41. PLOS One (PLOS)
42. RAIRO - Theoretical Informatics and Applications (EDP Sciences)
43. RNDM - International Workshop on Reliable Network Design and Modeling (conference)
44. Sensors (MDPI)
45. SN Computer Science (Springer Nature)
46. Sustainability (MDPI)
47. Telecommunication Systems (Springer)
48. Transactions on Emerging Telecommunications Technologies (Wiley)
49. Transportation Research Part B: Methodological (Elsevier)
50. Wireless Communications and Mobile Computing (Wiley)
51. WOCC - Wireless and Optical Communication Conference (conference)

Presentazioni a conferenze e workshop (selezione)

1. Seek & Beautify: integrating UAVs in the optimal beautification of e-scooter sharing fleets, **IEEE MT-ITS 2021-7th** International IEEE Conference on Models and Technologies for Intelligent Transportation Systems (virtual, 2021)
2. A Robust Optimization Approach for Designing FTTx Networks Integrating Free Space Optics Under Weather Uncertainty, **ACM Q2SWinet 2020**, 16th ACM Symposium on QoS and Security for Wireless Mobile Networks, Alicante, Spain (2020)
3. A Robust Optimization approach to DVB-T Network Design, **FRUCT27**, 27th Conference of Open Innovations Association FRUCT, Trento, Italy (2020)
4. Night makes you beautiful: an optimization approach to overnight joint beautification and relocation in e-scooter sharing, **MFTS 2020**, Symposium on Management of Future Motorway and Urban Traffic Systems, Luxembourg (2020)
5. An optimization model for renting public parking slots to carsharing services, **AIIT 2nd International Congress on Transport Infrastructure and Systems in a changing world**, Rome, Italy (2019)
6. A Matheuristic for Green and Robust 5G Virtual Network Function Placement, **EvoStar 2019**, Leipzig, Germany (2019)
7. An optimization approach for balancing maintenance costs and electricity consumption in Cloud Data Centers, **PGMO 2018**, Paris, France (2018)
8. Zero-price Energy Offering by (Multiband) Robust Optimization, **VAME 2017** – Variational Analysis and Applications for Modelling of Energy Exchange, Perpignan, France (2017)
9. Power Savings with Data Rate Guarantee in Dense WLANs, **MoWNeT 2017**, Avignon, France (2017)
10. Zero-price Energy Offering by Robust Optimization, **COST Workshop**, Modena, Italy (2016)
11. Green Design of Wireless Local Area Networks by Multiband Robust Optimization, **INOC 2017**, Lisbon, Portugal (2017)
12. A fast ILP-based Heuristic for the robust design of Body Wireless Sensor Networks, **EvoStar 2017**, Amsterdam, The Netherlands (2017)
13. Green Design of Wireless Local Area Networks by Multiband Robust Optimization, **ROADEF 2017**, Metz, France (2017)
14. Zero-price Energy Offering by Robust Optimization, **EURO 2016**, Poznan, Poland (2016)
15. Multiband Robust Optimization for optimal energy offering under price uncertainty, **ROADEF 2016**, Compiègne, France (2016)

16. Revisiting the use of Robust Optimization in unit commitment problems under market price uncertainty, **AIRO 2015**, Pisa, Italy (2015)
17. GUB Covers and Power-Indexed formulations for Wireless Network Design, **INFORMS Annual Meeting 2014**, San Francisco, USA (2014)
18. A Unified View on Tight Formulations for the Unit Commitment Problem with Optimal Transmission Switching, **PGMO-COPI 2014**, Paris, France (2014)
19. Multiband Robust Optimization, **International Workshop on Risk Management**, Tokyo, Japan (2014)
20. 0-1 Multiband Robust Optimization, **OR2013**, Rotterdam, Netherland (2013)
21. Multiband Robust Optimization, **MIP2013**, Workshop on Mixed Integer Programming, Madison, USA (2013)
22. Multi-band Robustness II: Constructing the Uncertainty Set, **INOC 2013**, International Network Optimization Conference, , Tenerife, Spain (2013)
23. Multi-band Robustness III: Application to Network Design Problems, **INOC 2013**, International Network Optimization Conference, , Tenerife, Spain (2013)
24. On the introduction of Multiband Uncertainty in Robust Optimization, **SMC 2013**, Stochastic Model Conference, Berlin, Germany (2013)
25. Robust Optimization under Multi-band uncertainty, **5th ROBUKOM Workshop**, Berlin, Germany (2012)
26. Robust Optimization under Multi-band Uncertainty, **AIRO 2012**, the 43rd Annual Conference of the Italian Operational Research Society, Salerno, Italy (2012)
27. A hybrid exact-ACO algorithm for the joint scheduling, power and cluster assignment in cooperative wireless networks, **Bionetics 2012**, the 7th Conference on Bio-Inspired Models of Network, Information, and Computing System, Lugano, Switzerland (2012)
28. On the adoption of multi-band uncertainty in robust network design, **ISMP 2012**, the 21st International Symposium on Mathematical Programming, Berlin, Germany (2012)
29. New results about multi-band uncertainty in Robust Optimiziation, **SEA 2012**, the 11th International Symposium on Experimental Algorithms Bordeaux, France (2012)
30. Introducing multi-band uncertainty in Robust Optimization, **4th ROBUKOM Workshop**, Munich, Germany (2012)
31. On the solution of Wireless Network Design Problems by Cycle Deletion, **INFORMS Telecom 2012**, the 11th INFORMS Telecommunications Conference, Boca Raton, USA (2012)
32. Exploiting dominance criteria in the design of survivable multi-layer networks, **INFORMS Telecom 2012**, the 11th INFORMS Telecommunications Conference, Boca Raton, USA (2012)
33. Solving Wireless Network Design Problems by Cycle Deletion, **HPSC 2012**, High Performance Scientific Computing, Hanoi, Vietnam (2012)
34. Improving the Efficiency of Algorithms for Survivable Multi-layer Network Design, **HPSC 2012**, High Performance Scientific Computing, Hanoi, Vietnam (2012)
35. On developing strong 0-1 formulations for Wireless Network Design, **ESF-JSPS Mathematics for Innovation: Large and Complex Systems**, Tokyo, Japan (2012)
36. ROBUKOM - Efficient design of survivable multi-layer networks, **3rd ROBUKOM Workshop**, Chemnitz, Germany (2011)
37. Negative Cycle Separation in Wireless Network Design, **INOC 2011**, International Network Optimization Conference, Hamburg, Germany (2011)
38. New models for the design of survivable multi-layer networks, **2nd ROBUKOM Workshop**, Berlin, Germany (2011)
39. New Pure 0-1 Programming Approaches to Wireless Network Design, **SNOW 2011**, the 2nd Nordic Workshop on System and Network Optimization for Wireless, Stöten, Sweden
40. On Improving the Capacity of Solving Large-scale Wireless Network Design Problems by Genetic Algorithms, **EvoStar 2011**, Torino, Italy (2011)
41. ROBUKOM - Efficient design of multi-layer networks, **1st ROBUKOM Workshop**, Aachen, Germany (2010)
42. Pure 0-1 Programming Approaches to Wireless Network Design, **INFORMS Telecom 2010**, the 10th INFORMS Telecommunication Conference 2010, Montreal, Canada (2010)

43. Robust Wireless Network Planning, **AIRO 2009**, the 40th Annual Conference of the Italian Operational Research Society, Siena, Italy (2009),
44. Power-Indexed Formulations for Wireless Network Design, **AIRO 2008**, the 40th Annual Conference of the Italian Operational Research Society, Ischia, Italy (2008)
45. Strengthening MILP formulations for Wireless Network Design, **APICE Workshop 2008**, Roma, Italy (2008)

Seminari su invito (selezione)

1. An optimization approach for balancing maintenance costs and electricity consumption in Cloud Data Centers, **Dipartimento di Informatica, Università degli Studi di Milano**, Milano, Italy (2019)
2. New optimization models for UAV systems management, **Laboratory ICUBE, University of Strasbourg**, Strasbourg, France (2019)
3. An introduction to Network Design under Uncertainty with special focus on Robust Optimization, **Summer School on Network Performance Evaluation and Optimization**, Technical University Chemnitz (2017)
4. Robust Zero-price Energy Offering, **ESSEC Business School**, Paris, France (2017)
5. Multiband Robust Optimization: theory and applications, **University of Rome Tor Vergata**, Rome, Italy (2017)
6. Multiband Robust Optimization: theory and applications, **Seminaire Parisienne d'Optimisation**, Paris, France (2017)
7. Multiband Robust Optimization: theory and applications, **Université Paris - Dauphine**, Paris, France (2016)
8. Theory and applications of Multiband Robust Optimization, **Université de Technologie de Compiègne**, Compiègne, France (2016)
9. Multiband Robust Optimization for Energy Offering, **SINTEF Oslo**, Oslo, Norway (2015)
10. Multiband Robust Optimization: theory and applications, **Università di Pisa**, Pisa, Italy (2015)
11. Real-world applications of Network Optimization, **RWTH Aachen**, Aachen, Germany (2015)
12. Multiband Robust Optimization of Networks, **DFG Research Center MATHEON**, Berlin, Germany (2015)
13. Multiband Robust Optimization: theory and applications, **INRIA Lille - Nord Europe**, Lille, France (2015)
14. Multiband Robust Optimization: theory and applications, **LIPN-University Paris 13**, Paris, France (2015)
15. 0-1 Multiband Robust Optimization and its application in Forest Scheduling, **Institute of Statistical Mathematics** Tokyo, Japan (2014)
16. Cycle of seminars on Stochastic and Robust Optimization, **SINTEF Oslo**, Oslo, Norway (2013)
17. New approaches to Multiperiod Network Design, **Warsaw Institute of Technology**, Warsaw, Poland (2013)
18. Multiband Robust Optimization: theory and applications, **Technical University Wien**, Vienna, Austria (2013)
19. Multiband Robust Optimization: theory and applications, **Austrian Institute of Technology**, Vienna, Austria (2013)
20. Multiband Robust Optimization: theory and applications, **IDSIA - Istituto Dalle Molle di Studi sull'Intelligenza Artificiale** (Lugano, Switzerland) (2012)
21. Power-Indexed Formulations for Wireless Network Design, **RWTH Aachen**, Aachen, Germany (2011)
22. Power-Indexed Formulations for Wireless Network Design, **Zuse Institute Berlin** (Berlin, Germany) (2010)
23. Pure 0-1 Programming approaches to Wireless Network Design, **Zuse Institute Berlin** (Berlin, Germany) (2010)
24. Pure 0-1 Programming approaches to Wireless Network Design, **Sapienza Università di Roma** (Roma, Italy) (2009)
25. Optimal bidding on keywords auctions, **Columbia University in the City of New York** (New York, USA) (2009)

Invited Research Visiting Periods

2017 - 2020

Numerosi inviti per research visit alle seguenti università francesi, italiane e tedesche:

- **University Paris Dauphine (Laboratory LAMSADE)**, Host: Prof. F. Furini, Paris, France
- **University of Lorraine (Laboratory LORIA)**, Host: Prof. E. Natalizio, Nancy, France
- **University of Strasbourg (Laboratory ICUBE)**, Host: Prof. T. Noel, Strasbourg, France
- **Technische Universität Berlin (Global Production Engineering)**, Host: Prof. H. Kohl, Berlin, Germany
- **Technische Universität Chemnitz (Chair of Communications Networks)**, Host: Prof. T. Bauschert, Chemnitz, Germany
- **Università Roma Tor Vergata (Dip. di Ingegneria Elettronica)**, Host: Prof. L. Chiaraviglio, Rome, Italy
- **Università Roma Tre (Dipartimento di Ingegneria)**, Host: Prof. S. Carrese, Rome, Italy

10/2017

ESSEC Business School (Paris, France), Host: Prof. L. Alfandari

01.03,05,09/2017

Università Roma Tor Vergata (Rome, Italy), Host: Prof. L. Chiaraviglio

11/2016

Technical University of Chemnitz (Chemnitz, Germany), Host: Prof. T. Bauschert

06/2016

Free University of Bruxelles (Bruxelles, Belgium), Host: Prof. B. Fortz

04/2016

École Polytechnique (Palaiseau, France), Host: Prof. L. Liberti

04/2016

École des Mines de Nantes (Nantes, France), Host: Prof. A. Dolgui

02/2016

Université Paris - Dauphine (Paris, France), Host: Dr. J. Lang

02/2016

Université de Technologie de Compiègne (Compiègne, France), Host: Prof. D. Nace

12/2015

SINTEF (Oslo, Norway), Host: Prof. C. Mannino

11/2015

Università di Pisa (Pisa, Italy), Host: Prof. M.G. Scutellà

07-09/2015

IASI-CNR (Rome, Italy), Host: Dr. G. Felici

04/2015

INRIA Lille Nord Europe (Lille, France), Host: Dr. L. Brotcorne

03/2015

LIX Ecole Polytechnique (Paris, France), Host: Dr. C. D'Ambrosio

03/2015

LIPN-University Paris 13 (Paris, France), Host: Prof. R. W. Calvo

12/2014-01/2015

IASI-CNR (Rome, Italy), Host: Dr. G. Felici

12/2014

SINTEF (Oslo, Norway), Host: Prof. C. Mannino

07-08/2014

IASI-CNR (Rome, Italy), Host: Dr. G. Felici

04/2014

Sapienza Università di Roma, DIAG (Roma, Italy), Host: Prof. R. Bruni

03/2014

Institute of Statistical Mathematics (Tokyo, Japan), Host: Prof. A. Yoshimoto

09/2013

SINTEF (Oslo, Norway), Host: Prof. C. Mannino

10/2013

IASI-CNR (Rome, Italy), Host: Dr. G. Felici

03/2013

Institute of Statistical Mathematics (Tokyo, Japan), Host: Prof. A. Yoshimoto

09/2013

Warsaw Institute of Technology (Warsaw, Poland), Host: Prof. M. Pioro

03/2013

Technical University Wien (Vienna, Austria), Host: Prof. G. Raidl

03/2013

Austrian Institute of Technology (Vienna, Austria), Host: Dr. J. Puchinger

12/2012

IDSIA - Istituto Dalle Molle di Studi sull'Intelligenza Artificiale (Lugano, Switzerland)
Host: Prof. L. Gambardella

11/2012

Lehrstuhl II für Mathematik, RWTH Aachen (Aachen, Germany), Host: Prof. A.M.C.A. Koster

09/2012

Dept. of Computer and System Science, Sapienza Università di Roma (Roma, Italy),
Host: Prof. A. Sassano

12/2011-01/2012

Dept. of Computer and System Science, Sapienza Università di Roma (Roma, Italy),
Host: Prof. A. Sassano

06/2011-07/2011

Lehrstuhl II für Mathematik, RWTH Aachen (Aachen, Germany), Host: Prof. A.M.C.A. Koster

05/2010-07/2010

Dept. of Industrial Engineering and Operations Research, Columbia University in the City of New York (New York, USA), Host: Prof. D. Bienstock

Capacità e competenze personali

- Lingue

Lingua madre Italiano

Altre lingue

	COMPRENSIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
Inglese	C2	C2	C2	C2	C2
Francese	B2	B2	B2	B2	B2
Tedesco	B2	B2	B2	B2	B2

Livelli: A1/A2: Utente base - B1/B2: Utente intermedio - C1/C2: Utente avanzato
Quadro Comune Europeo di Riferimento delle Lingue

- Capacità e competenze tecniche:

- linguaggi di programmazione: C/C++, Java, Python;
- sistemi Operativi: Linux, Windows;
- software di ottimizzazione: AMPL, Gurobi, IBM ILOG Cplex, LP-Solve;
- SQL; Database and Data Warehouse Systems;
- ottima conoscenza degli applicativi Microsoft Office (Word, Excel, Access, PowerPoint), Internet Browsers e Mail User Agent

Referenze

- Prof. Carlo Mannino**
- 1) Senior Research Scientist
Department of Mathematics and Cybernetics, SINTEF, Oslo, Norvegia
 - 2) Adjunct Professor of Statistics and Data Science
Department of Mathematics, University of Oslo, Oslo, Norvegia
(già Professore Associato di Ricerca Operativa presso il Dipartimento di Informatica e Sistemistica di Sapienza Università di Roma, Roma)
Indirizzo: Forskningsveien 1, 0373 Oslo
Recapito telefonico: +47 41588551
Email: carlo.mannino@sintef.no
- Prof. Ralf Borndörfer**
- 1) Head of the Department of Network Optimization
Zuse Institute Berlin (ZIB), Berlino, Germania
 - 2) Professor of Discrete Mathematics and Discrete Optimization
Freie Universität Berlin, Berlino, Germania
Indirizzo: Takustrasse 7, 14195 Berlino, Germania
Recapito telefonico: +49 (0) 30 84185243
Email: borndorfer@zib.de
- Prof. Antonio Sassano**
- 1) Professore Ordinario di Ricerca Operativa
Dipartimento di Ingegneria Informatica, Automatica e Gestionale, Sapienza Università di Roma, Roma
 - 2) Presidente
Fondazione Ugo Bordonis, Roma
Indirizzo: via Ariosto 25, 00185 Roma
Recapito telefonico: +39 77274080
Email: sassano@dis.uniroma.it
- Prof. Luca Chiaraviglio**
- Professore Associato di Ingegneria delle Telecomunicazioni
Dipartimento di Ingegneria Elettronica
Università di Roma Tor Vergata, Roma
Indirizzo: via del Politecnico 1, 00133 Roma
Recapito telefonico: 06 7259450
Email: luca.chiaraviglio@uniroma2.it
- Prof. Enrico Natalizio**
- 1) Principal Researcher
Communications and Networking Department
Autonomous Robotics Research Center
Technology Innovation Institute, Abu Dhabi, Emirati Arabi Uniti
 - 2) Full Professor
Laboratoire LORIA, Université de Lorraine, Nancy, Francia
Email: enrico.natalizio@loria.fr
- Prof. Stefano Carrese**
- Professore Ordinario di Ingegneria Civile
Dipartimento di Ingegneria
Università degli Studi Roma Tre, Roma
Indirizzo: via Vito Volterra 62, 00146 Roma
Recapito telefonico: 06 57333410
Email: stefano.carrese@uniroma3.it

Dichiaro che tutto quanto dichiarato nel presente curriculum vitae corrisponde a verità, ai sensi degli articoli 46 e 47 del D.P.R. 445 del 2000.

Luogo e data,
COMPIEGNE, 27/10/2021

Pierangelo Di Sanzo

Curriculum Vitæ

Posizione corrente

- **Ricercatore (RTD-B) - SSD INF/01**, presso il Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica, Università degli studi dell'Aquila.

Abilitazioni

- **Abilitazione scientifica nazionale (ASN)**, settore concorsuale 01/B1 - Informatica - II fascia (conseguita il 29/04/2021).
- **Abilitazione scientifica nazionale (ASN)**, settore concorsuale 09/H1 - Sistemi di elaborazione delle informazioni - II fascia (conseguita il 13/11/2020).
- **Abilitazione alla professione di ingegnere**, Sezione A - settore dell'informazione.

Titoli di studio

- marzo 2012 **Dottorato di ricerca in Ingegneria Informatica**, Sapienza, University of Rome.
Titolo della Tesi: Performance Models of Concurrency Control Protocols for Transaction Processing Systems
- febbraio 2008 **Laurea specialistica in Ingegneria Informatica**, Sapienza, University of Rome, Voto: 110/110 e lode.
Titolo della Tesi: Modellazione e valutazione di sistemi transazionali basati su controllo di concorrenza multiversione
- luglio 2005 **Laurea in Ingegneria Informatica**, Università di "Napoli Federico II", Voto: 102/110.
Titolo della Tesi: Un tool di sviluppo, validazione e controllo per progetti di automazione
- luglio 1996 **Diploma di maturità scientifica**, Liceo scientifico "G. Peano", Marsiconuovo (Pz), Voto: 60/60.

Docenze Universitarie

Docente dei seguenti corsi:

- 2020 – 2021 **Software Design for Robotics**, Corso di laurea magistrale in informatica, 6 CFU, Università degli studi dell'Aquila.
- 2020 – 2021 **Sistemi informativi per l'impresa in rete**, Corso di laurea magistrale in ingegneria informatica, 6 CFU, Università degli Studi Guglielmo Marconi.
- 2019 – 2020 **Sistemi informativi per l'impresa in rete**, Corso di laurea magistrale in ingegneria informatica, 6 CFU, Università degli Studi Guglielmo Marconi.
- 2018 – 2019 **Data Centers and High Performance Computing**, Corso di laurea magistrale in ingegneria informatica, 3 CFU, Sapienza Università di Roma.

- 2018 – 2019 **Sistemi informativi per l'impresa in rete**, *Corso di laurea magistrale in ingegneria informatica*, 6 CFU, Università degli Studi Guglielmo Marconi.
- 2017 – 2018 **Data Centers and High Performance Computing**, *Corso di laurea magistrale in ingegneria informatica*, 3 CFU, Sapienza Università di Roma (incluso anche nel percorso formativo del dottorato di ricerca in ingegneria informatica).
- 2009 – 2010 **Basi di dati**, *Corso di laurea in ingegneria informatica*, 6 CFU, Sapienza Università di Roma (sede di Rieti).
- 2008 – 2009 **Basi di dati**, *Corso di laurea in ingegneria informatica*, 6 CFU, Sapienza Università di Roma (sede di Rieti).

[Docente dei seguenti seminari didattici:](#)

- 2016 – 2017 **Data Centers and High Performance Computing – Topic: Transactional Memories**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2016 – 2017 **Capacity planning – Topic: performance and reliability evaluation: techniques and practice**, *Corso di laurea magistrale in ingegneria informatica*.
Sapienza Università di Roma
- 2015 – 2016 **Data Centers and High Performance Computing – Topic: Transactional Memories**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2015 – 2016 **Capacity planning – Topic: performance and reliability evaluation: techniques and practice**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2014 – 2015 **Concurrent and Parallel Programming – Topic: Transactional Memories**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2014 – 2015 **Capacity planning – Topic: performance and reliability evaluation: techniques and practice**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2013 – 2014 **Concurrent and Parallel Programming – Topic: Transactional Memories**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2013 – 2014 **Capacity planning – Topic: performance and reliability evaluation: techniques and practice**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2012 – 2013 **Concurrent and Parallel Programming – Topic: Transactional Memories**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2012 – 2013 **Capacity planning – Topic: performance and reliability evaluation: techniques and practice**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2011 – 2012 **Concurrent and Parallel Programming – Topic: Transactional Memories**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.
- 2011 – 2012 **Capacity planning – Topic: performance and reliability evaluation: techniques and practice**, *Corso di laurea magistrale in ingegneria informatica*, Sapienza Università di Roma.

[Tutor per i seguenti corsi:](#)

- 2009 – 2010 **Fondamenti di informatica**, *Corso di laurea in ingegneria informatica*, Sapienza Università di Roma (sede di Rieti).
- 2009 – 2010 **Caccolatori elettronici**, *Corso di laurea in ingegneria informatica*, Sapienza Università di Roma (sede di Rieti).

- 2008 – 2009 **Sistemi operativi**, *Corso di laurea in ingegneria informatica*, Sapienza Università di Roma (sede di Rieti).
- 2008 – 2009 **Fondamenti di informatica**, *Corso di laurea in ingegneria informatica*, Sapienza Università di Roma (sede di Rieti).

Incarichi accademici e di ricerca

- febbraio 2020 **Ricercatore**, (RTD-B) - SSD INF/01, *Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica*, Università degli studi dell'Aquila.
oggi
- febbraio 2020 **Assegnista di Ricerca**, DIAG – *Dipartimento di ingegneria informatica, automatica e gestionale*, Sapienza Università di Roma.
gennaio 2021 Progetto di ricerca: Ottimizzazione delle prestazioni e dell'efficienza energetica di applicazioni multi-threaded
- ottobre 2018 **Ricercatore**, ISSNOVA - *Institute for Sustainable Society and Innovation*.
dicembre 2019 Progetto di ricerca: Evolutionary Air Traffic Management (Progetto EU H2020 - SESAR). Studio di tecniche basate su algoritmi evolutivi per ottimizzare le performance dei sistemi di controllo del traffico aereo
- luglio 2018 **Assegnista di Ricerca**, DIAG – *Dipartimento di ingegneria informatica, automatica e gestionale*, Sapienza Università di Roma.
giugno 2019 Progetto di ricerca: Sviluppo e sperimentazione di tecniche per la regolazione dell'utilizzo di risorse di calcolo su sistemi multi-core ed ambienti cloud
- marzo 2018 **Assegnista di Ricerca**, DIAG – *Dipartimento di ingegneria informatica, automatica e gestionale*, Sapienza Università di Roma.
giugno 2018 Progetto di ricerca: Tecniche di analisi e valutazione delle performance applicate al sistema informativo per la cognizione penale del Ministero della giustizia
- settembre 2016 **Assegnista di Ricerca**, DIAG – *Dipartimento di ingegneria informatica, automatica e gestionale*, Sapienza Università di Roma.
agosto 2017 Progetto di ricerca: Tecniche di analisi e valutazione delle performance applicate al sistema informativo per la cognizione penale del Ministero della giustizia
- giugno 2014 **Ricercatore**, IRIANC - *International Research Institute for Autonomic Network Computing*, Monaco, Germania.
maggio 2016 Progetto di ricerca: Panacea – Proactive Autonomic Management of Cloud Resources (EU FP7 Project)
- agosto 2013 **Ricercatore**, CINFAI—*Consorzio Interuniversitario Nazionale per la Fisica delle Atmosfere e delle Idrosfere*, Roma, Italia.
febbraio 2015 Progetto di ricerca: SIGMA - Sistema Integrato di sensori in ambiente Cloud per la Gestione Multirischio Avanzata (PON2007-2013)
- maggio 2013 **Ricercatore**, INESC-ID - *Instituto de Engenharia de Sistemas e Computadores Investigacao e Desenvolvimento*, Lisbona, Portogallo.
giugno 2013 Progetto di ricerca: Performance Forecasting of Distributed Transactional Memory Systems
- marzo 2011 **Ricercatore**, CINI - *National Interuniversity Consortium for Informatics*, Roma, Italia.
aprile 2013 Progetto di ricerca: Cloud-TM: A novel programming paradigm for cloud computing (EU FP7)
- marzo 2010 **Assegnista di Ricerca**, DIS – *Dipartimento di Informatica e sistemistica*, Sapienza
febbraio 2011 Università di Roma.
Progetto di ricerca: Analisi delle performance ed ottimizzazione di memorie software transazionali
- marzo 2009 **Assegnista di Ricerca**, *Facoltà di Ingegneria*, Sapienza Università di Roma, settore
febbraio 2010 ING-INF/05.
Progetto di ricerca: Modellazione delle performance di sistemi di basi di dati

- giugno 2008 **Ricercatore**, *CINI - National Interuniversity Consortium for Informatics*, Roma,
 aprile 2009 Italia.
 Progetto di ricerca: Osservambiente, un sistema innovativo di monitoraggio per la governance territoriale
- novembre 2005 **Collaboratore di ricerca**, *DIS – Dipartimento di Informatica e sistemistica*, Uni-
 giugno 2006 versity of Naples "Federico II".
 Progetto di ricerca: progettazione e sviluppo di UniSim, una piattaforma per il design ed il testing software di automazione portatile

Partecipazione a Progetti nazionali ed internazionali

- **Co-coordinatore del progetto Earth in the Cloud**, *finanziato da Regione Lazio (POR-FESR 2014-2020, Progetti di Gruppi di ricerca 2020)*, il progetto Earth in the Cloud costituisce la naturale evoluzione del precedente progetto XClouder, e mira a sviluppare una nuova tecnologia che, attraverso tecniche basate su modelli matematici ed intelligenza artificiale, ha l'obiettivo di automatizzare, ottimizzare e minimizzare i costi del processo di sviluppo, messa in produzione ed operatività di applicazioni che elaborano dati di Osservazione della Terra su piattaforme di cloud computing.
 Partner di progetto: Università degli Studi di Roma Tor Vergata, Sapienza Università di Roma
- **Coordinatore del progetto XClouder – Automated and cost-effective earth observation data processing in the cloud (www.lockless.it)**, *finanziato da EU Copernicus Incubation Programme*, il progetto XClouder ha avuto l'obiettivo di realizzare una piattaforma innovativa per automatizzare ed ottimizzare i costi di processamento su piattaforme cloud di grandi set di dati satellitari per l'osservazione della terra.
 Partner di progetto: Lockless srl (a startup of Sapienza and Tor Vergata University of Rome), Sapienza Università di Roma
- **Ricercatore in ambito del progetto, EvoATM Evolutionary Air Traffic Management - A modelling framework to assess the impact of ATM evolutions (www.evoatm-project.eu/)**, *progetto EU H2020 - SESAR*, EvoATM si è focalizzato sullo studio di tecniche di simulazione agent-based ed algoritmi evolutivi per analizzare e valutare il comportamento dei sistemi di controllo del traffico aereo ed ottimizzarne le prestazioni sia a livello di singoli componenti che dell'intero sistema.
 Partner di progetto: Centro Italiano Ricerche Aerospaziali (Italy), Aslogic (Spain), Issnova (Italy), Pedece (Portugal), Crida (Spain), UAB Universitat Autònoma de Barcelona (Spain)
- **Membro del comitato di gestione della European COST Action EURO-TM – Transactional Memories: Foundations, Algorithms, Tools, and Applications (www.eurotm.org)**, *finanziato da European Cooperation in Science and Technology*, EURO-TM è stata un'azione COST volta a creare e coordinare una rete di ricercatori ed esperti di vari paesi europei che lavorano su aspetti interdisciplinari sul tema delle memorie transazionali.
 Partner di progetto: hanno partecipato vari gruppi di ricerca ed aziende provenienti da oltre 15 differenti paesi europei
- **Coordinatore del gruppo di ricerca dell'Università degli Studi di Roma La Sapienza, composto da 5 borsisti, in ambito di un progetto finalizzato all'assessment tecnico del sistema informativo per la cognizione penale del Ministero della giustizia**, *progetto finanziato in ambito di una convenzione stipulata tra il Ministero della giustizia e l'Università degli Studi di Roma La Sapienza*

- **Ricercatore e coordinatore dei task 3.2 e 3.3 in ambito del progetto URBEM – URban Environment Management (www.geo-k.co/urbem/)**, *finanziato da POR-FESR Lazio*, URBEM è stato un progetto finalizzato allo sviluppo di servizi di osservazione della terra basati sui tecniche di machine learning per l'analisi di dati satellitari. Un aspetto chiave dell'attività di ricerca è stato lo studio e la sperimentazione di tecniche per l'allocazione dinamica e proattiva delle risorse di calcolo al fine di minimizzare il costo di utilizzo e di offrire servizi pay-per-use su infrastrutture cloud..
Partner di progetto: GEO-K srl, C-SIG srl, In-TIME srl, Sapienza University of Rome
- **Rincercatore in ambito del progetto PANACEA – Proactive Autonomic Management of Cloud Resources (projects.laas.fr/panacea-cloud)**, *progetto EU FP7*, l'obiettivo di Panacea è stato quello di sviluppare tecniche, basate sull'apprendimento automatico, per la gestione autonoma e proattiva delle risorse di calcolo in ambiente cloud al fine di contrastare la violazione degli SLA ed incrementare performance e disponibilità delle applicazioni su infrastrutture cloud geograficamente distribuite.
Partner di progetto: Centre National De La Recherche Scientifique (France), International Research Institute For Autonomic Network Computing (Irianc), Ev (Germany), Atos Spain Sa (Spain), Universidad Complutense De Madrid (Spain), Qos Design Sarl (France), Ibm Israel - Science And Technology Ltd (Israel), Imperial College Of Science Technology And Medicine (United Kingdom), Atos Consulting Canarias Sa Unipersonal (Spain)
- **Rincercatore e coordinatore del Task 3.1 in ambito del progetto Cloud-TM. A Novel Programming Paradigm for the Cloud (www.cloudtm.eu)**, *Progetto EU FP7*, l'obiettivo di Cloud-TM è stato lo sviluppo di una piattaforma middleware basata su approcci di calcolo transazionale volta a facilitare lo sviluppo e la riduzione dei costi operativi e di gestione delle applicazioni cloud..
Partner di progetto: INESC-ID (Portugal), CINI (IT), Algorithmica S.r.l (IT), Red Hat Limited (IE)
- **Ricercatore in ambito del progetto ARISTOS – Autonomic Replication of Software Transactional memories (aristos.gsd.inesc-id.pt)**, *finanziato da Fundação para a Ciência e a Tecnologia, Portogallo*, ARISTOS è stato un progetto congiunto tra INESC-ID (Lisbona) e l'Università degli Studi di Roma La Sapienza focalizzato sulla progettazione e l'implementazione di una piattaforma STM (Software Transactional Memory) distribuita ed auto-ottimizzante. .
Partner di progetto: INESC-ID (Portugal), DIS – Sapienza Università di Roma
- **Rincercatore in ambito del progetto SIGMA: Cloud-based Integrated Sensors System for Advanced Multirisk Management**, *finanziato da Programma Operativo Nazionale (PON2007-2013)*, l'obiettivo di SIGMA è stato quello di sviluppare una piattaforma middleware per l'acquisizione, l'integrazione ed il processamento di dati eterogenei, provenienti da varie reti di sensori, al fine di fornire informazioni utili per il monitoraggio, la previsione e la gestione delle situazioni di rischio, attraverso servizi forniti a cittadini ed imprese, sia pubblici che privati. .
Partner di progetto: Università degli Studi di Messina, Università degli studi di Catania, CINFAI, CNIT, Fondazione Centro Studi Investimenti Sociali Censis, Delisa Sud srl., Selex ES S.p.A., Neodata Group s.r.l., STMicroelectronics, Istituto Nazionale di Geofisica e Vulcanologia, Engineering Ingegneria Informatica S.p.a., CNR, Insirio, Xenia Progetti srl

- **Rincercatore in ambito del progetto Osservambiente, un sistema innovativo di monitoraggio per la governance territoriale**, finanziato da Regione Campania (Misura 3.17 del POR Campania 2000/2006), Osservambiente è stato un progetto di ricerca per sviluppare un sistema di monitoraggio ambientale a supporto della governance territoriale, nel quale sono stati progettati e valutati schemi di gestione di dati ed algoritmi per supportare l'ottimizzazione di missioni di monitoraggio eseguite da veicoli attrezzati con varie tipologie di sensori per il monitoraggio del territorio..

Partner di progetto: NERGAL s.r.l., CINI

Contributo al trasferimento tecnologico e creazione di nuove imprese

settembre 2017 **Socio fondatore di Lockless S.r.l. (www.lockless.it), startup dell'Università degli Studi di Roma La Sapienza.**

Lockless S.r.l. ha come principale missione il trasferimento tecnologico dei risultati di ricerca ai fini dello sviluppo di prodotti software per architetture di calcolo ad alte prestazioni e di supporto allo sviluppo di applicazioni e piattaforme di simulazione real-time .

Partecipazione a comitati editoriali, organizzazione di conferenze ed attività di revisione di articoli scientifici

Comitati editoriali:

- **Guest Editor**, *Special Issue "Analysis and Optimization for Energy Efficient Computer and Network Systems"*, *Journal: Energies*, Publisher: MDPI, Submission deadline prevista per il 30/09/2021.

Organizzazione di conferenze internazionali

- **Program Co-Chair**, *15th IEEE International Symposium on Network Computing and Applications (NCA 2016)*.
- **Program Committee Member**, *Workshop on Performance and Energy-efficiency in Concurrent Systems (PECS 2021)*, co-located with the *12th ACM/SPEC International Conference on Performance Engineering*.
- **Program Committee Member**, *10th International Conference on Advances in System Simulation (SIMUL 2018)*.
- **Program Committee Member**, *16th IEEE International Symposium on Network Computing and Applications (NCA 2017)*.
- **Publication Chair**, *15th IEEE International Symposium on Network Computing and Applications (NCA 2016)*.
- **Program Committee Member**, *4th IEEE Symposium on Network Cloud Computing and Applications (NCCA 2015)*.

Revisore per le seguenti riviste internazionali:

- Journal of Parallel and Distributed Computing (Elsevier)
- Transactions on Architecture and Code Optimization (ACM)
- Transactions on Modeling and Computer Simulation (ACM)
- IEEE Access (IEEE)
- Simulation Modelling Practice and Theory (Elsevier)
- Concurrency and Computation: Practice and Experience (Wiley)
- International Journal of Parallel Emergent and Distributed Systems (Taylor Francis)
- The Open Cybernetics and Systemics Journal (Bentham Open)
- Neural Network World

Revisore per le seguenti conferenze e workshop internazionali:

- Workshop on Performance and Energy-efficiency in Concurrent Systems (PECS 2021)
- 10th International Conference on Advances in System Simulation (SIMUL 2018)
- 16th IEEE International Symposium on Network Computing and Applications (NCA 2017)
- 9th International Conference on Reversible Computation (RC 2017)
- 15th IEEE International Symposium on Network Computing and Applications (NCA 2016)
- 4th IEEE Symposium on Network Cloud Computing and Applications (NCCA 2015)
- 3rd IEEE Symposium on Network Cloud Computing and Applications (NCCA 2014)
- 10th International Conference on Autonomic and Autonomous Systems (ICAS 2014)
- 21st IEEE International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2013)
- 3rd International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH 2013)
- 10th International Conference on Services Computing (SCC 2013)
- 12th IEEE International Symposium on Network Computing and Applications (NCA 2013)

Attività di supervisione e co-supervisione di studenti

Supervisione e co-supervisione di tesi di laurea

Sono stato supervisore e co-supervisore di oltre 30 tesi di laurea in ambito di corsi di laurea magistrale/specialistica in ingegneria informatica

Co-supervisione di studenti di dottorato

Ho svolto attività di co-supervisione di 3 studenti di dottorato in ingegneria informatica

Attività di consulenza

- | | |
|------------------------------|--|
| giugno 2020
novembre 2020 | Ministero della Giustizia – DGSIA (Direzione generale per i sistemi informativi automatizzati).
Consulente, per conto del CINI, in ambito del progetto "Evoluzione dell'architettura dei sistemi informatici per la giustizia civile e penale ed infrastruttura telematica" per l'attività di modellazione di processi di area civile e penale del Ministero della Giustizia, mediante linguaggio BPMN, ai fini della futura reingegnerizzazione dei sistemi informatici del DGSIA |
| aprile 2019 | TDGroup Italia. |
| giugno 2019 | Consulente tecnico di parte in ambito della gara di appalto per la realizzazione e gestione del sistema cloud della pubblica amministrazione della regione Toscana |
| giugno 2016
dicembre 2016 | Ministero della Giustizia – DGSIA (Direzione generale per i sistemi informativi automatizzati).
Consulente, per conto della CRUI (Conferenza dei Rettori delle Università italiane) per l'analisi e valutazione dei sistemi software a supporto del sistema informativo della cognizione penale |
| novembre 2011 | SELEX Service Management – Finmeccanica Group. |
| febbraio 2012 | Analisi a valutazione del SISTRI (sistema di controllo della tracciabilità dei rifiuti) commissionato dal Ministero dell'Ambiente, in particolare in relazione alla caratterizzazione del carico di sistema, alla pianificazione ed esecuzione dei test prestazionali, alla valutazione dei risultati |

luglio 2011 **Poste Italiane S.p.A.**
settembre 2011 Analisi e valutazione del sistema informativo centrale di Poste Italiane (SDP – Service Delivery Platform) in seguito dei malfunzionamenti generali avvenuti nel giugno 2011

Allegati

- 1 Lista delle pubblicazioni selezionate
- 2 Presentazioni di lavori

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae
in base al D. Lgs. 196/2003.

Roma, 27 ottobre 2021

Pierangelo Di Sanzo

Allegato 1: Lista delle Pubblicazioni

International Journal Articles

- [1] Stefano Conoci, Pierangelo Di Sanzo, Alessandro Pellegrini, Bruno Ciciani, and Francesco Quaglia. On power capping and performance optimization of multi-threaded applications. *Concurrency and Computation: Practice and Experience*, 33(13):e6205, 2021.
- [2] Pierangelo Di Sanzo, Dimiter R. Avresky, and Alessandro Pellegrini. Autonomic rejuvenation of cloud applications as a countermeasure to software anomalies. *Software: Practice and Experience*, 51(1):46–71, 2021.
- [3] A. Pellegrini, P. D. Sanzo, B. Bevilacqua, G. Duca, D. Pascarella, R. Palumbo, J. J. Ramos, M. À. Piera, and G. Gigante. Simulation-based evolutionary optimization of air traffic management. *IEEE Access*, 8:161551–161570, 2020.
- [4] Romolo Marotta, Davide Tiriticco, Pierangelo Di Sanzo, Alessandro Pellegrini, Bruno Ciciani, and Francesco Quaglia. Mutable locks: Combining the best of spin and sleep locks. *Concurrency and Computation: Practice and Experience*, 32(22):e5858, 2020.
- [5] Matteo Principe, Tommaso Tocci, Pierangelo Di Sanzo, Francesco Quaglia, and Alessandro Pellegrini. A distributed shared memory middleware for speculative parallel discrete event simulation. *ACM Trans. Model. Comput. Simul.*, 30(2), March 2020.
- [6] P. Di Sanzo, A. Pellegrini, M. Sannicandro, B. Ciciani, and F. Quaglia. Adaptive model-based scheduling in software transactional memory. *IEEE Transactions on Computers*, 69(5):621–632, May 2020.
- [7] P. Di Sanzo. Analysis, classification and comparison of scheduling techniques for software transactional memories. *IEEE Transactions on Parallel and Distributed Systems*, 28(12):3356–3373, 2017.
- [8] D. Rughetti, P. Di Sanzo, B. Ciciani, and F. Quaglia. Machine learning-based thread-parallelism regulation in software transactional memory. *Journal of Parallel and Distributed Computing*, 109:208–229, 2017.
- [9] P. Di Sanzo, F. Quaglia, B. Ciciani, A. Pellegrini, D. Didona, P. Romano, R. Palmieri, and S. Peluso. A flexible framework for accurate simulation of cloud in-memory data stores. *Simulation Modelling Practice and Theory*, 58:219–238, 2015.
- [10] P. Di Sanzo, B. Ciciani, R. Palmieri, F. Quaglia, and P. Romano. On the analytical modeling of concurrency control algorithms for software transactional memories: The case of commit-time-locking. *Performance Evaluation*, 69(5):187–205, 2012.
- [11] A. Pellegrini and P. Di Sanzo. On the optimization of collaborative kerbside waste collection. *WSEAS Transactions on Environment and Development*, 13:66–74, 2017.

Book Chapters

- [12] J. Barreto, P. Di Sanzo, R. Palmieri, and P. Romano. *Cloud-TM: An elastic, self-tuning transactional store for the cloud*, volume 2. IGI Global, 2014.
- [13] Diego Rughetti, Pierangelo Di sanzo, Francesco Quaglia, and Bruno Ciciani. *Machine Learning Based Dynamic Reconfiguration of Distributed Data Management Systems*. John Wiley & Sons, Ltd, 2015.
- [14] D. Rughetti, P.D. Sanzo, A. Pellegrini, B. Ciciani, and F. Quaglia. Tuning the level of concurrency in software transactional memory: An overview of recent

analytical, machine learning and mixed approaches. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 8913:395–417, 2015.

International Conference Articles

- [15] S. Economo, E. Silvestri, P. Di Sanzo, A. Pellegrin, and F. Quaglia. Model-based proactive read-validation in transaction processing systems. In *2018 IEEE 24th International Conference on Parallel and Distributed Systems (ICPADS)*, pages 481–488, 2018.
- [16] Stefano Conoci, Davide Cingolani, Pierangelo Di Sanzo, Alessandro Pellegrini, Bruno Ciciani, and Francesco Quaglia. A power cap oriented time warp architecture. In *Proceedings of the 2018 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation*, PADS. ACM, May 2018.
- [17] Stefano Conoci, Pierangelo Di Sanzo, Bruno Ciciani, and Francesco Quaglia. Adaptive performance optimization under power constraint in multi-thread applications with diverse scalability. In *Proceedings of the 2018 ACM/SPEC International Conference on Performance Engineering*, ICPE '18, pages 16–27, New York, NY, USA, 2018. ACM.
- [18] Simone Economo, Emiliano Silvestri, Pierangelo Di Sanzo, Alessandro Pellegrini, and Francesco Quaglia. Prompt application-transparent transaction revalidation in software transactional memory. In *Proceedings of the 16th IEEE International Symposium on Network Computing and Applications*, NCA, pages 114–119. IEEE Computer Society, October 2017.
- [19] Dimiter R. Avresky, Alessandro Pellegrini, and Pierangelo Di Sanzo. Machine learning-based management of cloud applications in hybrid clouds: a hadoop case study. In *Proceedings of the 16th IEEE International Symposium on Network Computing and Applications*, NCA, pages 114–119. IEEE Computer Society, October 2017.
- [20] E. Silvestri, S. Economo, P. Di Sanzo, A. Pellegrini, and F. Quaglia. Preemptive software transactional memory. In *Proceedings of the 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing*, CCGrid '17, pages 294–303, Piscataway, NJ, USA, 2017. IEEE Press.
- [21] P. Di Sanzo and B. Ciciani. Cpu-core frequency scaling for efficient thread scheduling in transactional memories. In *International Conference on High Performance Computing and Simulation, HPCS 2016*, pages 42–47. Institute of Electrical and Electronics Engineers Inc., 2016.
- [22] A. Pellegrini, P. Di Sanzo, and D.R. Avresky. Proactive cloud management for highly heterogeneous multi-cloud infrastructures. In *Proceedings of the IEEE 30th International Parallel and Distributed Processing Symposium, IPDPS 2016*, pages 1311–1318. Institute of Electrical and Electronics Engineers Inc., 2016.
- [23] P. Di Sanzo, M. Sannicandro, B. Ciciani, and F. Quaglia. Markov chain-based adaptive scheduling in software transactional memory. In *Proceedings of the IEEE 30th International Parallel and Distributed Processing Symposium, IPDPS 2016*, pages 373–382. Institute of Electrical and Electronics Engineers Inc., 2016.
- [24] D.R. Avresky, P. Di Sanzo, A. Pellegrini, B. Ciciani, and L. Forte. Proactive scalability and management of resources in hybrid clouds via machine learning. In Busnel Y. Avresky D.R., Avresky D.R., editor, *Proceedings of the IEEE 14th International Symposium on Network Computing and Applications, NCA 2015*, pages 114–119. Institute of Electrical and Electronics Engineers Inc., 2016.

- [25] D. R. Avresky, P. Di Sanzo, A. Pellegrini, B. Ciciani, and L. Forte. Proactive scalability and management of resources in hybrid clouds via machine learning. In *2015 IEEE 14th International Symposium on Network Computing and Applications*, pages 114–119, 2015.
- [26] P. Di Sanzo, A. Pellegrini, and D.R. Avresky. Machine learning for achieving self-* properties and seamless execution of applications in the cloud. In *Proceedings of the IEEE 4th Symposium on Network Cloud Computing and Applications, NCCA 2015*, pages 51–58. Institute of Electrical and Electronics Engineers Inc., 2015.
- [27] A. Pellegrini, P. Di Sanzo, and D.R. Avresky. A machine learning-based framework for building application failure prediction models. In *Proceedings of the IEEE 29th International Parallel and Distributed Processing Symposium Workshops, IPDPSW 2015*, pages 1072–1081. Institute of Electrical and Electronics Engineers Inc., 2015.
- [28] D. Rughetti, P.D. Sanzo, B. Ciciani, and F. Quaglia. Dynamic feature selection for machine-learning based concurrency regulation in stm. In *Proceedings of the 22nd Euromicro International Conference on Parallel, Distributed, and Network-Based Processing, PDP 2014*, pages 68–75. IEEE Computer Society, 2014.
- [29] P. Di Sanzo, F. Molfese, D. Rughetti, and B. Ciciani. Providing transaction class-based qos in in-memory data grids via machine learning. In *Proceedings of the IEEE 3rd Symposium on Network Cloud Computing and Applications, NCCA 2014*, pages 46–53. IEEE Computer Society, 2014.
- [30] D. Rughetti, P. Di Sanzo, and A. Pellegrini. Adaptive transactional memories: Performance and energy consumption tradeoffs. In *Proceedings of the IEEE 3rd Symposium on Network Cloud Computing and Applications, NCCA 2014*, pages 105–112. IEEE Computer Society, 2014.
- [31] D. Rughetti, P.D. Sanzo, B. Ciciani, and F. Quaglia. Analytical/ml mixed approach for concurrency regulation in software transactional memory. In *Proceedings of 14th IEEE/ACM International Symposium on Cluster, Cloud, and Grid Computing, CCGrid 2014*, pages 81–91. IEEE Computer Society, 2014.
- [32] P. Di Sanzo, F.D. Re, D. Rughetti, B. Ciciani, and F. Quaglia. Regulating concurrency in software transactional memory: An effective model-based approach. In *Proceedings of International Conference on Self-Adaptive and Self-Organizing Systems, SASO*, pages 31–40, 2013.
- [33] A. Porfirio, A. Pellegrini, P. Di Sanzo, and F. Quaglia. Transparent support for partial rollback in software transactional memories. In *Proceedings of the 19th International Conference on Parallel and Distributed Computing, Euro-Par 2013*, pages 583–594. Springer Berlin Heidelberg, 2013.
- [34] P. Di Sanzo, F. Antonacci, B. Ciciani, R. Palmieri, A. Pellegrini, S. Peluso, F. Quaglia, D. Rughetti, and R. Vitali. A framework for high performance simulation of transactional data grid platforms. In Himmelsbach J. Cai W., Vanmechelen K., editor, *Proceedings of the 6th International Conference on Simulation Tools and Techniques, SIMUTools 2013*, pages 63–72. ICST, 2013.
- [35] P. Di Sanzo, D. Rughetti, B. Ciciani, and F. Quaglia. Auto-tuning of cloud-based in-memory transactional data grids via machine learning. In *Proceedings - IEEE 2nd Symposium on Network Cloud Computing and Applications, NCCA 2012*, pages 9–16, 2012.
- [36] R. Palmieri, P. Di Sanzo, F. Quaglia, P. Romano, S. Peluso, and D. Didona. Integrated monitoring of infrastructures and applications in cloud environments. In

- [37] D. Rughetti, P. Di Sanzo, B. Ciciani, and F. Quaglia. Machine learning-based self-adjusting concurrency in software transactional memory systems. In *Proceedings of the 2012 IEEE 20th International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems, MASCOTS 2012*, pages 278–285, 2012.
- [38] B. Ciciani, D. Didona, P. Di Sanzo, R. Palmieri, S. Peluso, F. Quaglia, and P. Romano. Automated workload characterization in cloud-based transactional data grids. In *Proceedings of the 2012 IEEE 26th International Parallel and Distributed Processing Symposium Workshops, IPDPSW 2012*, pages 1525–1533, 2012.
- [39] P. Di Sanzo, B. Ciciani, R. Palmieri, F. Quaglia, and P. Romano. Analytical modeling of commit-time-locking algorithms for software transactional memories. In *Proceedings of the 36th International Conference Computer Measurement Group*, 2010.
- [40] P. Di Sanzo, R. Palmieri, B. Ciciani, F. Quaglia, and P. Romano. Analytical modeling of lock-based concurrency control with arbitrary transaction data access patterns. In *Proceedings of the 1st Joint WOSP/SIPEW International Conference on Performance Engineering, WOSP/SIPEW'10*, pages 69–78, 2010.
- [41] P. Di Sanzo, B. Ciciani, F.Q. Sapienza, and P. Romano. A performance model of multi-version concurrency control. In *Proceedings of the IEEE International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems, MASCOTS 2008*, 2008.
- [42] G. De Tommasi, P. Di Sanzo, and A. Pironti. A graphical tool for design portable automation software. In *IFAC Proceedings Volumes (IFAC-PapersOnline)*, volume 7, pages 440–445, 2006.

Conferenze e workshop internazionali:

- **CPU-core Frequency Scaling for Efficient Thread Scheduling in Transactional Memories**, *International Workshop on Autonomic High Performance Computing (AHPC 2016)*, Innsbruck, Austria, July 2016.
- **Markov Chain-based Adaptive Scheduling in Software Transactional Memory**, *30th IEEE International Parallel & Distributed Processing Symposium (IPDPS 2016)*, Chicago, USA, May 2016.
- **Machine Learning for Achieving Self-* Properties and Seamless Execution of Applications in the Cloud**, *4th Symposium on Network Cloud Computing and Applications (NCCA 2015)*, Munich, Germany, June 2015.
- **Providing transaction class-based QoS in in-memory data grids via machine learning**, *3rd IEEE Symposium on Network Cloud Computing and Applications*, Rome, Italy, February 2014.
- **Adaptive transactional memories: Performance and energy consumption tradeoffs**, *3rd IEEE Symposium on Network Cloud Computing and Applications*, Rome, Italy, February 2014.
- **Providing Transaction Class-Based QoS in in-Memory Data Grids Via Machine Learning**, *Euro-TM Workshop on Transactional Memory*, Amsterdam, The Netherlands, April 2014.
- **Regulating Concurrency in Software Transactional Memory: An Effective Model-based Approach**, *7th IEEE International Conference on Self-Adaptive and Self-Organizing Systems*, Philadelphia, PA, USA, September 2013.
- **Performance Modeling and Replication of Software Transactional Memories**, *Euro-TM 1st Plenary Meeting*, Paris, France, May 2011.
- **Analytical Modeling of Commit-Time-Locking Algorithms for Software Transactional Memories**, *36th International Computer Measurement Group Conference (CMG)*, Orlando, USA, December 2010.

Curriculum Vitae di **Andrea Ribichini**

Dati Anagrafici

Nome: Andrea

Cognome: Ribichini

Titoli di Studio Conseguiti

29/02/2008 – **Titolo di Dottore di Ricerca in Ingegneria Informatica**
conseguito presso l'Università degli Studi di Roma “La Sapienza”.

04/04/2005 – **Abilitazione all'Esercizio della Professione di Ingegnere**
conseguita presso l'Università degli Studi di Roma “La Sapienza”.

30/10/2002 – **Laurea Quinquennale in Ingegneria Elettronica**
conseguita presso l'Università degli Studi di Roma “La Sapienza”.

21/07/1992 – **Maturità Classica**
conseguita presso il Liceo Ginnasio Statale “Giulio Cesare” di Roma.

Pubblicazioni

in Riviste Internazionali:

- C. Demetrescu, A. Ribichini, M. Schaerf “**Are Italian research assessment exercises size-biased?**”, pubblicato su *Scientometrics* 125 (2020), pagg. 533-549, Springer.

- C. Demetrescu, I. Finocchi, A. Ribichini, M. Schaerf “**On bibliometrics in academic promotions: a case study in computer science and engineering in Italy**”, pubblicato su *Scientometrics* 124 (2020), pagg. 2207-2228, Springer.

- G. Ausiello, P. G. Franciosa, I. Lari, A. Ribichini “**Max flow vitality in general and st-planar graphs**”, pubblicato su *Networks*, volume 74, numero 1 (2019), pagg. 70-78, Wiley.

- C. Demetrescu, F. Lupia, A. Mendicelli, A. Ribichini, F. Scarcello, M. Schaerf “**On the Shapley value and its application to the Italian VQR research assessment exercise**”, pubblicato su *Journal of Informetrics (JOI)*, volume 13, numero 1 (Febbraio 2019), pagg. 87-104, Elsevier.

- C. Demetrescu, A. Ribichini, M. Schaerf “**Accuracy of Author Names in Bibliographic Data Sources: An Italian Case Study**”, pubblicato su *Scientometrics*, volume 117, numero 3 (Dicembre 2018), pagg. 1777-1791, Springer.

- F. Lupia, A. Mendicelli, A. Ribichini, F. Scarcello, M. Schaerf “**Computing the Shapley value in allocation problems: approximations and bounds, with an application to the Italian VQR research assessment program**”, pubblicato su *Journal of Experimental & Theoretical Artificial Intelligence (JETAI)*, volume 30, numero 4 (2018), pagg. 505-524, Taylor & Francis.

- G. Ausiello, P. G. Franciosa, G. F. Italiano, A. Ribichini “**On Resilient Graph Spanners**”, pubblicato su *Algorithmica*, volume 74, numero 4 (Aprile 2016), pagg. 1363-1385, Springer.

- C. Demetrescu, I. Finocchi, A. Ribichini “**Reactive Imperative Programming with Dataflow Constraints**”, pubblicato su *ACM Transactions on Programming Languages and Systems (TOPLAS)*, volume 37, numero 1 (Novembre 2014), articolo n. 3, ACM New York,

NY, USA.

- G. Ausiello, P. G. Franciosa, G. F. Italiano, A. Ribichini **“Computing Graph Spanners in Small Memory: Fault-Tolerance and Streaming”**, pubblicato su *Discrete Mathematics, Algorithms and Applications (DMAA)*, volume 2, numero 4 (2010), pagg. 591-605, World Scientific Publishing Company.

- C. Demetrescu, B. Escoffier, G. Moruz, A. Ribichini **“Adapting Parallel Algorithms to the W-Stream Model, with Applications to Graph Problems”**, pubblicato su *Theoretical Computer Science (TCS)*, volume 411, numero 44-46 (Ottobre 2010), pagg. 3994-4004, Elsevier Science Publishers Ltd. Essex, UK.

- C. Demetrescu, I. Finocchi, A. Ribichini **“Trading Off Space for Passes in Graph Streaming Problems”**, pubblicato su *ACM Transactions on Algorithms (TALG)*, volume 6, numero 1 (Dicembre 2009), pagg. 1-17, ACM New York, NY, USA.

- G. Ausiello, C. Demetrescu, P. G. Franciosa, G. F. Italiano, A. Ribichini **“Graph Spanners in the Streaming Model: an Experimental Study”**, pubblicato su *Algorithmica*, volume 55, numero 2 (Ottobre 2009), pagg. 346-374, Springer New York.

in Proceeding di Conferenze Internazionali:

- G. Ausiello, P. G. Franciosa, G. F. Italiano, A. Ribichini **“On Resilient Graph Spanners”**, in Proceedings of the 21st Annual European Symposium on Algorithms (ESA '13), pagg. 85-96, 2013.

- C. Demetrescu, I. Finocchi, A. Ribichini **“Reactive Imperative Programming with Dataflow Constraints”**, in Proceedings of the 26th ACM International Conference on Object-Oriented Programming, Systems, Languages and Applications (OOPSLA '11), pagg. 407-426, 2011. All'articolo è stato conferito un riconoscimento come *“OOPSLA Distinguished Paper”*. Questo articolo e' stato anche pubblicato in ACM SIGPLAN Notices, volume 46, issue 10, pagg. 407-426, 2011.

- G. Ausiello, P. G. Franciosa, G. F. Italiano, A. Ribichini **“Computing Graph Spanners in Small Memory: Fault-Tolerance and Streaming”**, in Proceedings of the 16th Annual International Computing and Combinatorics Conference (COCOON '10), pagg. 160-172, 2010.

- G. Ausiello, C. Demetrescu, P. G. Franciosa, G. F. Italiano, A. Ribichini **“Small Stretch Spanners in the Streaming Model: New Algorithms and Experiments”**, in Proceedings of the 15th Annual European Symposium on Algorithms (ESA '07), pagg. 605-617, 2007.

- C. Demetrescu, B. Escoffier, G. Moruz, A. Ribichini **“Adapting Parallel Algorithms to the W-Stream Model, with Applications to Graph Problems”**, in Proceedings of the 32nd International Symposium on Mathematical Foundations of Computer Science (MFCS '07), pagg. 194-205, 2007.

- C. Demetrescu, I. Finocchi, A. Ribichini **“Trading Off Space for Passes in Graph Streaming Problems”**, in Proceedings of the 17th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA '06), pagg. 714-

723, 2006.

in Proceeding di Workshop Internazionali:

- F. Lupia, A. Mendicelli, A. Ribichini, F. Scarcello, M. Schaerf
“Computing the Shapley Value in Allocation Problems: Approximations and Bounds, with an Application to the Italian VQR Research Assessment Program”, in CEUR Workshop Proceedings, volume 1745, 2016, pp. 27-43 (23rd RCRA International Workshop on Experimental Evaluation of Algorithms for Solving Problems with Combinatorial Explosion, RCRA 2016; November 2016).

Partecipazione a Progetti di Ricerca

Partecipazione, in qualità di *research contributor*, ai seguenti Progetti di ricerca di Rilevante Interesse Nazionale (PRIN):

- Amanda: Algorithmics for MAssive and Networked DAta, MIUR, PRIN 2012.
- AlgoDEEP: Algorithmic Challenges for Data-intensive Processing on Emerging Computing Platforms, MIUR, PRIN 2008.
- MainStream: Algorithms for Massive Information Structures and Data Streams, MIUR, PRIN 2006.
- Algo-Next: Algorithms for the Next Generation Internet and Web: Methodologies, Design and Applications, MIUR, PRIN 2004.

Partecipazione a Conferenze in Qualità di Relatore

Relatore presso il 32nd International Symposium on Mathematical Foundations of Computer Science (MFCS 2007), August 26 - 31, 2007, Český Krumlov, Czech Republic.

Conoscenze Informatiche

Sistemi operativi: Microsoft Windows, GNU Linux.

Linguaggi di programmazione: C, C++, Java, Python, PySpark, PHP, Assembly (Intel x86/x86_64).

Software per il typesetting: LaTeX.

Database: MySQL, MongoDB.

Librerie software ed API: Posix, Qt, Spring Framework.

Ambienti di sviluppo: Eclipse, DataBricks.

Conoscenze Linguistiche

Ottima conoscenza della lingua inglese, parlata e scritta.

Esperienze Lavorative

Occupazione attuale:

(01/05/2021 -): Assegno di Ricerca presso il Dipartimento di Ingegneria Informatica, Automatica e Gestionale “Antonio Ruberti” dell’Università degli Studi di Roma “La Sapienza”, per “Analisi bibliometriche in area

informatica”.

2020 – 2021:

(01/03/2020 – 31/01/2021): Assegno di Ricerca presso il Dipartimento Istituto Italiano di Studi Orientali ISO dell’Università degli Studi di Roma “La Sapienza”, relativo al progetto di ricerca “Sviluppo di un sistema automatizzato di recupero da cataloghi e banche dati, disambiguazione tramite identificativi univoci e indicizzazione di descrizioni bibliografiche in scritture non latine; realizzazione di un metaopac per la ricerca e consultazione di tali dati”.

2019 – 2020:

(01/08/2019 – 31/01/2020): Contratto di lavoro autonomo per “Definizione delle modalità di ingestione, pulizia ed analisi dei dati per i progetti EcoDigit/Anagrafe” presso il Dipartimento di Ingegneria Informatica, Automatica e Gestionale “Antonio Ruberti” dell’Università degli Studi di Roma “La Sapienza”.

(20/03/2019 – 05/06/2019): Ruolo tecnico (area tecnica, tecnico-scientifica ed elaborazione dati), categoria D, posizione economica D1, presso l’Università degli Studi di Roma “La Sapienza”. Dal 01/04/2019 al 05/06/2019 in servizio presso l’Area Supporto Strategico e Comunicazione.

(01/03/2019 – 19/03/2019): Assegno di Ricerca presso il Dipartimento di Ingegneria Informatica, Automatica e Gestionale “Antonio Ruberti” dell’Università degli Studi di Roma “La Sapienza”, relativo al progetto di ricerca “Architetture, tecniche e metodi per l’Anagrafe del distretto Beni Culturali Regione Lazio”.

2014 – 2018:

(01/06/2014 – 31/05/2018): Assegno di ricerca presso il Dipartimento di Fisica dell’Università degli Studi di Roma “La Sapienza”, per l’Attività “Supporto VQR”. Sviluppo di software e database per l’analisi e la gestione dei dati previsti dal bando della Valutazione Qualità e Ricerca’.

2013:

(01/03/2013 – 31/10/2013): Contratto di collaborazione coordinata e continuativa per “Progetto e realizzazione sistema per la visualizzazione di reti metaboliche” presso il Dipartimento di Ingegneria Informatica, Automatica e Gestionale “Antonio Ruberti” dell’Università degli Studi di Roma “La Sapienza”.

- Docente a contratto per il corso di “Fondamenti di Informatica” (6 CFU), a.a. 2012/2013, Corso di Laurea in Ingegneria Gestionale, Università degli Studi di Roma “La Sapienza”.

2012:

(01/03/2012 – 30/11/2012): Contratto di collaborazione coordinata e continuativa per “Progetto e sviluppo di software per l’individuazione di proprietà strutturali in ipergrafi rappresentanti reti complesse” presso il Dipartimento di Ingegneria Informatica, Automatica e Gestionale “Antonio Ruberti” dell’Università degli Studi di Roma “La Sapienza”.

2011:

(10/03/2011 – 09/11/2011): Contratto di collaborazione coordinata e continuativa per “Progetto e sviluppo di software per l'individuazione di proprietà strutturali in grafi rappresentanti reti complesse” presso il Dipartimento di Informatica e Sistemistica dell'Università degli Studi di Roma “La Sapienza”.

(10/01/2011 – 18/07/2011): Contratto di collaborazione occasionale per docenza corso IFTS “Tecnico Superiore per le Applicazioni Informatiche” (autorizzato dalla Regione Lazio), modulo “Linguaggi di Programmazione”, presso l'Istituto “G. Meschini” di Roma.

2010:

(01/10/2010 – 31/12/2010): Contratto di collaborazione coordinata e continuativa per “Progetto e sviluppo di una estensione del linguaggio C per la programmazione a vincoli dataflow” presso il Dipartimento di Informatica e Sistemistica dell'Università degli Studi di Roma “La Sapienza”.

- Docente a contratto per il corso di “Fondamenti di Informatica I” (6 CFU), a.a. 2009/2010, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma “La Sapienza”.

- Docente a contratto per il corso di “Fondamenti di Informatica I” (6 CFU), a.a. 2009/2010, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma “La Sapienza” - Sede di Rieti.

- Tutoraggio per il corso di “Basi di Dati”, a.a. 2009/2010, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma “La Sapienza” - Sede di Rieti.

2009:

- Docente a contratto per il corso di “Fondamenti di Informatica I” (6 CFU), a.a. 2008/2009, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma “La Sapienza”.

- Docente a contratto per il corso di “Fondamenti di Informatica I (I modulo)” (6 CFU), a.a. 2008/2009, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma “La Sapienza” - Sede di Rieti.

- Tutoraggio per il corso di “Basi di Dati”, a.a. 2008/2009, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma “La Sapienza” - Sede di Rieti.

2008:

- Docente a contratto per il corso di “Fondamenti di Informatica II” (6 CFU), a.a. 2007/2008, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma “La Sapienza” - Sede di Rieti.

(05/03/2008 – 31/05/2008): Contratto di collaborazione coordinata e continuativa per “Sviluppo e implementazione di algoritmi di data stream per problemi su grafi” presso il Dipartimento di Informatica e Sistemistica dell'Università degli Studi di Roma “La Sapienza”.

- Tutoraggio per il corso di “Fondamenti di Informatica”, a.a. 2007/2008, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma

Curriculum Vitae di **Andrea Ribichini**

“La Sapienza”.

2007:

- Tutoraggio per il corso di “Fondamenti di Informatica”, a.a. 2006/2007, Corso di Laurea in Ingegneria Informatica, Università degli Studi di Roma “La Sapienza”.

2003:

(01/11/2003 – 30/11/2003): Contratto di collaborazione occasionale per “Progettazione e sviluppo del sito Web per il Dottorato di Ricerca in Ingegneria Informatica” presso il Dipartimento di Informatica e Sistemistica dell'Università degli Studi di Roma “La Sapienza”.

(30/01/2003 – 30/04/2003): Contratto di collaborazione occasionale per “Progettazione e sviluppo di una libreria grafica in ambiente Windows” presso il Dipartimento di Informatica e Sistemistica dell'Università degli Studi di Roma “La Sapienza” .

Roma, 01/10/2021