

Elenco delle pubblicazioni di Lorenzo Ariemma

- M. Cannavicchio, L. Ariemma, D. Barbosa and P. Merialdo. Leveraging Wikipedia Table Schemas for Knowledge Graph Augmentation. 2018. International Workshop on Web and Databases.
- M. Scazzariello, L. Ariemma, T. Caiazzì. Kathará: A Lightweight Network Emulation System. 2020. IEEE Network Operations and Management Symposium.
- M. Scazzariello, L. Ariemma, G. Di Battista, M. Patrignani. Megalos: A Scalable Architecture for the Virtualization of Network Scenarios. 2020. IEEE Network Operations and Management Symposium.
- M. Scazzariello, L. Ariemma, G. Di Battista, M. Patrignani. Megalos: A Scalable Architecture for the Virtualization of Large Network Scenarios. 2021. Special Issue on Information Processing and Management for Large and Complex Networks
- L. Ariemma, M. Scazzariello, T. Caiazzì. MRT#: a Fast Multi-Threaded MRT Parser. 2021. IFIP/IEEE International Symposium on Integrated Network Management.
- T. Caiazzì, M. Scazzariello, L. Ariemma. VFTGen: a Tool to Perform Experiments in Virtual Fat Tree Topologies. 2021. IFIP/IEEE International Symposium on Integrated Network Management.
- L. Ariemma, S. Liotta, M. Candela, G. Di Battista. Long-Lasting Sequences of BGP Updates. 2021. Passive and Active Measurement conference.
- T. Caiazzì, M. Scazzariello, L. Alberro, L. Ariemma, A. Castro, E. Grampin, G. Di Battista. Sibyl: a Framework for Evaluating the Implementation of Routing Protocols in Fat Trees. 2022. IEEE Network Operations and Management Symposium.
- L. Ariemma. Signals from Long-lasting Interdomain Routing Events. 2022. PhD Thesis. XXXIV Cycle. Dept. of Engineering. Roma Tre University.
- L. Ariemma, N. De Carlo, D. Pennino, M. Pizzonia, A. Vitaletti. Blockchain-Based Tracking of the Supply Chain of the Italian Craft Beer Sector. 2022. 4th Workshop on Distributed Ledger Technology.
- L. Ariemma, A. Dell'Orco, S. Liotta, M. Candela, G. Di Battista. Long-Lasting Sequences of BGP Updates. 2023. Computer Networks Journal, Elsevier.

List of Papers - Diego Pennino

Journal Publications:

- [j5] Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Blockchain as IoT Economy Enabler: A Review of Architectural Aspects**. Journal of Sensor and Actuator Networks, 11(2), 20, (2022)
- [j4] Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Efficient Certification of Endpoint Control on Blockchain**. IEEE Access 9: 133309-133334 (2021)
- [j3] Albenzio Cirillo, Vito Dalena, Antonio Mauro, Francesco Mogavero, Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Empowering Citizens by a Blockchain-Based Robinson List**. International Journal of Computers and Applications, 1-9 (2021)
- [j2] Diego Pennino, Maurizio Pizzonia, Federico Griscioli: **Pipeline-integrity: Scaling the use of authenticated data structures up to the cloud**. Future Gener. Comput. Syst. 100: 618-647 (2019)
- [j1] Diego Pennino, Maurizio Pizzonia, Alessio Papi: **Overlay Indexes: Efficiently Supporting Aggregate Range Queries and Authenticated Data Structures in Off-the-Shelf Databases**. IEEE Access 7: 175642-175670 (2019)

Conference Publications:

- [c6] Alessandro Bellini, Antonio Bonifacio, Salvatore Esposito De Falco, Simone Naldini, Francesco Pacileo, Diego Pennino, Maurizio Pizzonia, Domenico Sardanelli, Andrea Vitaletti, Pietro Vito and Marco Zecchini: **On-Chain Global Maintenance Services**. Proceedings <http://ceur-ws.org> ISSN 1613 (2022): 0073
- [c5] Lorenzo Ariemma, Niccolò De Carlo, Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti and Marco Zecchini: **Blockchain-Based Tracking of the Supply Chain of the Italian Craft Beer Sector**. Proceedings <http://ceur-ws.org> ISSN 1613 (2022): 0073
- [c4] Albenzio Cirillo, Antonio Mauro, Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Decentralized Robinson list**. 3rd Workshop on Cryptocurrencies and Blockchains for Distributed Systems, CryBlock20, 2020.
- [c3] Gianmaria Del Monte, Diego Pennino, Maurizio Pizzonia: **Scaling Blockchains Without Giving up Decentralization and Security**. 3rd Workshop on Cryptocurrencies and Blockchains for Distributed Systems, CryBlock20, 2020.
- [c2] Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Binding of Endpoints to Identifiers by On-Chain Proofs**. 1st Workshop on Blockchain theory and Applications (BRAIN 2020) in conjunction with ISCC 2020, 2020. To appear.
- [c1] Matteo Bernardini, Diego Pennino, Maurizio Pizzonia: **Blockchains Meet Distributed Hash Tables: Decoupling Validation from State Storage**. DLT@ITASEC 2019: 43-55

PUBBLICAZIONI

1. S. Rossetti, D. Zappia, **M. Sanzari**, M. Schaerf and F. Pirri. "Max Pooling with Vision Transformers reconciles class and shape in weakly supervised semantic segmentation". *In proceedings of the European Conference on Computer Vision (ECCV)*, 2022.
2. E. Alati, C.A. Caracciolo, M. Costa, **M. Sanzari**, P. Russo and I. Amerini. "aRTIC GAN: A Recursive Text-Image-Conditioned GAN". *Electronics* 2022, 11, 1737.
3. **M. Sanzari**, V. Ntouskos and F. Pirri. "Discovery and recognition of motion primitives in human activities". *PloS one* 14.4: e0214499, 2019.
4. L. Mauro, F. Puja, S. Grazioso, V. Ntouskos, **M. Sanzari**, E. Alati, L. Freda and F. Pirri. "Visual Search and Recognition for Robot Task Execution and Monitoring". *Applications of Intelligent Systems (APPIS)*, 310, 94-109, 2018.
5. L. Mauro, E. Alati, **M. Sanzari**, V. Ntouskos, G. Massimiani, and F. Pirri. "Deep execution monitor for robot assistive tasks". *In proceedings of the European Conference on Computer Vision (ECCV) Workshops*, 2018.
6. **M. Sanzari**, V. Ntouskos and F. Pirri. "Bayesian image based 3D pose estimation". *In proceedings of the European Conference on Computer Vision (ECCV)*, 9912, 566-582, 2016.
7. M. Qodseya, **M. Sanzari**, V. Ntouskos and F. Pirri. "A3D: A device for studying gaze in 3D". *In proceedings of the European Conference on Computer Vision (ECCV) Workshops*, 9913, 572-588, 2016.
8. F. Natola, V. Ntouskos, F. Pirri and **M. Sanzari**. "Single image object modeling based on BRDF and r-surfaces learning". *In proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, pp. 4414-4423, 2016.
9. Ntouskos V., **Sanzari M.**, Cafaro B., Nardi F., Natola F., Pirri F., Ruiz M., "Component-wise modeling of articulated objects". *In Proceedings of the IEEE International Conference on Computer Vision (ICCV)*, pp. 2327-2335, 2015.
10. Natola F., Ntouskos V., **Sanzari M.**, Pirri F., "Bayesian non-parametric inference for manifold based mocap representation". *In Proceedings of the IEEE International Conference on Computer Vision (ICCV)*, pp. 4606-4614, 2015.

PERSONAL INFORMATION **Lorenzo Ariemma**

EDUCATION AND TRAINING

- 02/11/2018–31/01/2022 **PhD in Computer Science and Automation** EQF level 8
Dept. Of Engineering, Università degli Studi Roma Tre, Rome (Italy)
Thesis title: "Signals from Long-lasting Interdomain Routing Events"
- 09/2015–20/03/2018 **Master's Degree in Computer Science and Engineering** EQF level 7
Dept. Of Engineering, Roma Tre University, Rome (Italy)
Final score 110/110 cum laude
- 09/2012–07/2015 **Bachelor's Degree in Computer Science and Engineering** EQF level 6
Dept. Of Engineering, Roma Tre University, Rome (Italy)
Final score 110/110
- 09/2007–07/2012 **High School Diploma** EQF level 4
Liceo Scientifico Statale Evangelista Torricelli, Rome (Italy)
Final score 78/100

WORK EXPERIENCE

- 04/2022–03/2023 **Postdoctoral Researcher**
Dept. Of Engineering, Roma Tre University, Rome (Italy)
LazioChain: blockchain and decentralization for the Agrifood – project POR FESR LAZIO 2014 – 2020
Project Code POR A0375E0116. Title: "Applicazioni decentralizzate per le filiere produttive".
- 07/2018–10/2018 **Trainee**
Plug-in Srl, Origgio, VA (Italy)
Research project on Anomalies of Interdomain Routing
- 06/2018–06/2018 **Research Collaborator**
Università degli Studi Roma Tre, Rome (Italy)
Analysis of Anomalies of Interdomain Routing
- 03/2015–07/2015 **Computer programmer**
Technip Italy S.p.A., Rome (Italy)
Setting up AirWatch (by VMware) platform for MDM of company's devices

DIDACTIC EXPERIENCE

Teaching Assistant

I was a teacher assistant during the AY 2018/2019 for the course “Infrastrutture delle Reti di Calcolatori”, Dept. of Engineering, Roma Tre University. Contract Rep. 102/2018, Prot. 3198, 17/09/2018.

Subject Expert Courses

- AY 2022/2023 – Internet and Data Centers, Reti di Calcolatori, Visualizzazione delle Informazioni
- AY 2021/2022 – Internet and Data Centers, Reti di Calcolatori, Visualizzazione delle Informazioni
- AY 2020/2021 – Infrastrutture delle Reti di Calcolatori, Reti di Calcolatori, Visualizzazione delle Informazioni
- AY 2019/2020 – Infrastrutture delle Reti di Calcolatori, Visualizzazione delle Informazioni

Co-supervised master thesis

- AY 2021/2022 – Andrea Marrocco, Susanna Caroppo, and Samuele Quinzi
- AY 2020/2021 – Alessandro Dell’Orco, and Marta Buroschi
- AY 2019/2020 – Alex Cocciatelli, Simone Liotta, Tommaso Caiazzzi, Lorenzo D’Abbieri, and Roberto Francazi
- AY 2018/2019 – Federico Yusteenappar, Davide Soldani, and Mariano Scazzariello.

Co-supervised bachelor thesis

- AY 2020/2021 – Maurizio Brini
- AY 2018/2019 – Andrea Vona

Seminars

I held the following seminars:

- 12-15-16-19-22/12/2022 – Five lessons seminar, held together with Ing. Tommaso Caiazzzi, on the Data Center architectures and networks during the “Internet and Data Centers” course, held by Prof. Giuseppe Di Battista at Roma Tre University.
- 10-12/10/2022 – Two lessons seminar on the basic concepts of Kathará, a computer network emulator during the “Internet and Data Centers” course, held by Prof. Giuseppe Di Battista at Roma Tre University.
- 23-24/05/2022 – Two lessons seminar, held together with Ing. Mariano Scazzariello and Ing. Tommaso Caiazzzi, on the basic concepts of Kathará, a computer network emulator, and Data Center networks. The seminar was held during the “Architetture dei Calcolatori and Cloud Computing” course, held by Prof. Roberto Riggio at Politecnico delle Marche.
- 8/11/2021 – Seminar on the basic usage of a switch and a packet analyser during the “Computer Network” course, held by Prof. Giuseppe Di Battista at Roma Tre University.
- 7-8/10/2021 – Two lessons seminar on the basic concepts of Kathará, a computer network emulator during the “Internet and Data Centers” course, held by Prof. Maurizio Patrignani at Roma Tre University.
- 9/10/2020 – Seminar on the basic concepts of Kathará, a computer network emulator during the “Infrastrutture delle Reti di Calcolatori” course, held by Prof. Giuseppe Di Battista at Roma Tre University.
- 4-6-7/11/2019 – Three lessons seminar on the basic concepts of Kathará, a computer network emulator during the “Infrastrutture delle Reti di Calcolatori” course, held by Prof. Maurizio Patrignani at Roma Tre University.

PUBLICATIONS

Computer Networks Journal	L. Ariemma, A. Dell'Orco, S. Liotta, M. Candela, G. Di Battista. Long-Lasting Sequences of BGP Updates. 2023. Computer Networks Journal, Elsevier.
DLT 2022	L. Ariemma, N. De Carlo, D. Pennino, M. Pizzonia, A. Vitaletti. Blockchain-Based Tracking of the Supply Chain of the Italian Craft Beer Sector. 2022. 4th Workshop on Distributed Ledger Technology.
PhD Thesis	L. Ariemma. Signals from Long-lasting Interdomain Routing Events. 2022. XXXIV Cycle. Dept. of Engineering. Roma Tre University.
NOMS 2022	T. Caiazzì, M. Scazzariello, L. Alberro, L. Ariemma, A. Castro, E. Grampin, G. Di Battista. Sibyl: a Framework for Evaluating the Implementation of Routing Protocols in Fat-Trees. 2022. IEEE Network Operations and Management Symposium.
PAM 2021	L. Ariemma, S. Liotta, M. Candela, G. Di Battista. Long-Lasting Sequences of BGP Updates. 2021. Passive and Active Measurement conference.
IM 2021	T. Caiazzì, M. Scazzariello, L. Ariemma. VFTGen: a Tool to Perform Experiments in Virtual Fat Tree Topologies. 2021. IFIP/IEEE International Symposium on Integrated Network Management.
IM 2021 (Best Demo Paper Award)	L. Ariemma, M. Scazzariello, T. Caiazzì. MRT#: a Fast Multi-Threaded MRT Parser. 2021. IFIP/IEEE International Symposium on Integrated Network Management.
Future Internet Journal	M. Scazzariello, L. Ariemma, G. Di Battista, M. Patrignani. Megalos: A Scalable Architecture for the Virtualization of Large Network Scenarios. 2021. Special Issue on Information Processing and Management for Large and Complex Networks.
NOMS 2020	M. Scazzariello, L. Ariemma, G. Di Battista, M. Patrignani. Megalos: A Scalable Architecture for the Virtualization of Network Scenarios. 2020. IEEE Network Operations and Management Symposium.
NOMS 2020 (Best Demo Paper Award)	M. Scazzariello, L. Ariemma, T. Caiazzì. Kathará: A Lightweight Network Emulation System. 2020. IEEE Network Operations and Management Symposium.
WebDB 2018	M. Cannaviccio, L. Ariemma, D. Barbosa and P. Merialdo. Leveraging Wikipedia Table Schemas for Knowledge Graph Augmentation. 2018. International Workshop on Web and Databases.

TECHNICAL SKILLS

Tools and Libraries	.NET, .NET Core, ASP.NET Core, Docker, Kubernetes, Node.js, AngularJS, Arduino IDE, jQuery, Hadoop MapReduce, Apache Spark, MongoDB, Redis, Postgres, MySQL, Android, Xamarin, SQLite, Pentaho, JSP, Git, Adobe Photoshop
Projects	<p>Last projects include:</p> <ul style="list-style-type: none"> 2021 – BGPie, a framework to find long-lasting instabilities of BGP updates 2019 – Kathará, a network emulation tool using Docker and Kubernetes 2017 – Mentor, a tool to augment DBpedia via Wikipedia Tables (Master thesis) 2017 – Crowd Lector, a Web tool to get evaluation using crowd sourcing 2016 – GreenBee, WebInterface and REST API for a Smart Social Urban Garden <p>Full portfolio on GitHub, GitLab and LinkedIn</p>
Programming Languages	C, C#, Java, JavaScript, Python, Prolog, PHP, Shell and Batch scripting
Other skills	BGP Professional Badge, from: Namex, available here

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
	First Certificate in English, Level B2, 2011 Preliminary English Test, Level B1, Pass with Merit, 2010				
Spanish	A2	A2	A2	A2	A2

Driving licence A, B, Boat license both sailing and motor within 12 miles

ORGANIZATIONS

- 12/2017–12/2018** Vicepresident of MUG - Microcontrollers User Group
The purpose M.U.G. Roma Tre is to develop a community of individuals who cooperate to enhance their skills on the use of programmable microcontrollers.
- 01/2017–12/2017** Member of MUG - Microcontrollers User Group
- 05/2014** Founder of GameLab @ Roma3
The aim of the GameLab is to spread knowledge about game development to members of any level of experience, by offering themed seminars and direct exchange of knowledge in co-working spaces.

Diego PENNINO

WORK EXPERIENCE

- SEP 2021 - *Today* Postdoctoral researcher in Computer Science at ENGINEERING DEP. UNIVERSITY OF ROMA3, Rome
LazioChain: blockchain and decentralization for the Agrifood project POR FESR LAZIO 2014 – 2020 - Project Code POR A0375E0116
- NOV 2020 - AUG 2021 Postdoctoral researcher in Computer Science at ENGINEERING DEP. UNIVERSITY OF ROMA3, Rome
The trunk of research is about Data Integrity in distributed (i.e. Cloud Computing) and decentralized (i.e. Blockchain) scenarios. It is focused on the use of the *Authenticated Data Structure (ADS)* and on the scalability issues.
- MAR-SEP 2017 Scholarship at MINISTRY OF JUSTICE, Rome
Analysis of critical aspects of penal area systems.
- NOV 2016-FEB 2017 Collaboration Contract at ENGINEERING UNIVERSITY OF ROMA3, Rome
Work on a european project named *PREEMPTIVE* about the security of the *Industrial Control System*. In particular, the realization of a Merkle Hash Trees optimized for the application.

EDUCATION

- OCT 2017 - OCT 2020 PhD in Computer Science at ENGINEERING UNIVERSITY OF ROMA3, Rome
Thesis title: Data Integrity and Scalability in Cloud-Based and Blockchain-Based Systems.
Final exam: April 16th 2021
- OCTOBER 2016 Master's Degree in ENGINEERING
105/110 *Computer Science Specialization*, **University of Roma3**, Rome
Promiscuous use of USB devices in critical systems:
checking the integrity of files by the use of authenticated data structures
Advisor: Maurizio PIZZONIA
- JULY 2014 Bachelor's Degree. in ENGINEERING
95/110 *Computer Science Specialization*, **University of Roma3**, Rome
Integration of a SAAS Crawler into a web data extraction system
Advisor: Paolo MERIALDO

AWARDS

2018	First prize	Scientific School on Blockchain & distributed ledger technology Contest, in Pula(italy)
2020	Algorand first prize	Asset Creation and Management Platform Challenge at Future of Blockchain competition

PUBLICATIONS

Journal Publications:

- [j5] Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Blockchain as IoT Economy Enabler: A Review of Architectural Aspects.** Journal of Sensor and Actuator Networks, 11(2), 20, (2022)
- [j4] Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Efficient Certification of Endpoint Control on Blockchain.** IEEE Access 9: 133309-133334 (2021)
- [j3] Albenzio Cirillo, Vito Dalena, Antonio Mauro, Francesco Mogavero, Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Empowering Citizens by a Blockchain-Based Robinson List.** International Journal of Computers and Applications, 1-9 (2021)
- [j2] Diego Pennino, Maurizio Pizzonia, Federico Griscioli: **Pipeline-integrity: Scaling the use of authenticated data structures up to the cloud.** Future Gener. Comput. Syst. 100: 618-647 (2019)
- [j1] Diego Pennino, Maurizio Pizzonia, Alessio Papi: **Overlay Indexes: Efficiently Supporting Aggregate Range Queries and Authenticated Data Structures in Off-the-Shelf Databases.** IEEE Access 7: 175642-175670 (2019)

Conference Publications:

- [c6] Alessandro Bellini, Antonio Bonifacio, Salvatore Esposito De Falco, Simone Naldini, Francesco Pacileo, Diego Pennino, Maurizio Pizzonia, Domenico Sardanelli, Andrea Vitaletti, Pietro Vito and Marco Zecchini: **On-Chain Global Maintenance Services.** Proceedings <http://ceur-ws.org> ISSN 1613 (2022): 0073
- [c5] Lorenzo Ariemma, Niccolò De Carlo, Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti and Marco Zecchini: **Blockchain-Based Tracking of the Supply Chain of the Italian Craft Beer Sector.** Proceedings <http://ceur-ws.org> ISSN 1613 (2022): 0073
- [c4] Albenzio Cirillo, Antonio Mauro, Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Decentralized Robinson list.** 3rd Workshop on Cryptocurrencies and Blockchains for Distributed Systems, CryBlock20, 2020.
- [c3] Gianmaria Del Monte, Diego Pennino, Maurizio Pizzonia: **Scaling Blockchains Without Giving up Decentralization and Security.** 3rd Workshop on Cryptocurrencies and Blockchains for Distributed Systems, CryBlock20, 2020.
- [c2] Diego Pennino, Maurizio Pizzonia, Andrea Vitaletti, Marco Zecchini: **Binding of End-points to Identifiers by On-Chain Proofs.** 1st Workshop on Blockchain theory and Applications (BRAIN 2020) in conjunction with ISCC 2020, 2020. To appear.
- [c1] Matteo Bernardini, Diego Pennino, Maurizio Pizzonia: **Blockchains Meet Distributed Hash Tables: Decoupling Validation from State Storage.** DLT@ITASEC 2019: 43-55

TEACHINGS

- OCT 2017 - *Today* Cybersecurity course assistant (Master's Degree). The course is held by professor *Maurizio Pizzonia* at ENGINEERING DEP. UNIVERSITY OF ROMA3, Rome
- JAN 2022 - *Today* Subject Expert “*Cybersecurity*” (ING-INF/05)(Master's Degree). The course is held by professor *Maurizio Pizzonia* at ENGINEERING DEP. UNIVERSITY OF ROMA3, Rome

PROJECTS

Kdbtree <https://github.com/kdbtree/kdbtree>

ORGANIZING COMMITTEE

DLT22 <https://dlt2022.github.io/>

www.AlboPretorioOnline.it

Marta Sanzari

CONTACT INFORMATION Name: Marta
Surname: Sanzari

GENERAL INFORMATION I'm a machine learning, deep learning and computer vision researcher with a strong background in mathematics. As a researcher I did support my advisor developing algorithms related to publications, writing papers and working for a European project. As a teaching assistant I supported my advisor taking lectures, exams and preparing students to take exams at their best. I participated to international conferences to share my research to the computer vision community. As a support researcher for the European project I participated to meetings and developed algorithms for the project proof of concepts.

RESEARCH EXPERIENCE **Research fellow** 2015 - 2018 (**3 years**)
ALCOR Laboratory,
University La Sapienza of Rome
Supervisor: Prof. Fiora Pirri
Work activity: Support researcher for the European project "Second Hands: A Robot Assistant for Industrial Maintenance Tasks".
Projects:
– Object recognition for industrial environment. Hardware: Asus Xtion depth camera. Tools: python, opencv, tensorflow.
– Objects relations recognition.
– Human activity recognition for industrial environment.
Research fellow 2021 - present (**1 year**)
ALCOR Laboratory,
University La Sapienza of Rome
Supervisor: Prof. Marco Schaerf
Work activity: Research activity for the projects "Inner ear 3D segmentation and reconstruction" and "Artemisia".

PROFESSIONAL EXPERIENCE **Computer Vision R&D Engineer** 2018 - 2020 (**2 years**)
Konica Minolta Laboratory Europe
Work activity: Computer vision and machine learning algorithms design and implementation.
High school teacher - mathematics 2020 - 2021 (**1 year**)
Istituto Superiore IISS ITC Di Vittorio - ITI Lattanzio Roma

EDUCATION **Sapienza University of Rome, Italy**
• *Ph.D. in Engineering in Computer Science* 2015 - 2019
ALCOR, Vision, Perception and Learning Robotics Lab,
Department of Computer, Control and Management Engineering (DIAG)
• Advisor: Prof. Fiora Pirri
• Thesis: *Towards an understanding of human activities: from the skeleton to the space*
• European Projects:
• Second Hands: A Robot Assistant for Industrial Maintenance Tasks

• *Master of Science in Artificial Intelligence and Robotics*

2012 - 2015

- Thesis: *Component Based Articulated Object Reconstruction*
- Main Subjects: Robotics, Autonomous Robotics, Computer Vision and Perception, Artificial Intelligence, Machine Learning, Computer Graphics, Robot Programming, Neural Networks
- Supervisor: Prof. Fiora Pirri
- Description of the Thesis: Development of an approach for 3D modeling of articulated objects using both components, the object's main parts, and components aspects, specific views of the components.

• *Bachelor Degree in Mathematics*

2007 - 2011

- Thesis: *Entropy Estimate Through the Burrows-Wheeler Transform*
- Main Subjects: Mathematics and Physics
- Supervisor: Prof. Emanuele Caglioti
- Description of the Thesis: Implementation of an algorithm for the estimation of the entropy based on the Burrows-Wheeler Transform (BWT).

PUBLICATIONS

1. S. Rossetti, D. Zappia, **M. Sanzari**, M. Schaefer and F. Pirri. "Max Pooling with Vision Transformers reconciles class and shape in weakly supervised semantic segmentation". *In proceedings of the European Conference on Computer Vision (ECCV)*, 2022.
2. E. Alati, C.A. Caracciolo, M. Costa, **M. Sanzari**, P. Russo and I. Amerini. "aRTIC GAN: A Recursive Text-Image-Conditioned GAN". *Electronics* 2022, 11, 1737.
3. **M. Sanzari**, V. Ntouskos and F. Pirri. "Discovery and recognition of motion primitives in human activities". *PloS one* 14.4: e0214499, 2019.
4. L. Mauro, F. Puja, S. Grazioso, V. Ntouskos, **M. Sanzari**, E. Alati, L. Freda and F. Pirri. "Visual Search and Recognition for Robot Task Execution and Monitoring". *Applications of Intelligent Systems (APPIS)*, 310, 94-109, 2018.
5. L. Mauro, E. Alati, **M. Sanzari**, V. Ntouskos, G. Massimiani, and F. Pirri. "Deep execution monitor for robot assistive tasks". *In proceedings of the European Conference on Computer Vision (ECCV) Workshops*, 2018.
6. **M. Sanzari**, V. Ntouskos and F. Pirri. "Bayesian image based 3D pose estimation". *In proceedings of the European Conference on Computer Vision (ECCV)*, 9912, 566-582, 2016.
7. M. Qodseya, **M. Sanzari**, V. Ntouskos and F. Pirri. "A3D: A device for studying gaze in 3D". *In proceedings of the European Conference on Computer Vision (ECCV) Workshops*, 9913, 572-588, 2016.
8. F. Natola, V. Ntouskos, F. Pirri and **M. Sanzari**. "Single image object modeling based on BRDF and r-surfaces learning". *In proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, pp. 4414-4423, 2016.
9. Ntouskos V., **Sanzari M.**, Cafaro B., Nardi F., Natola F., Pirri F., Ruiz M., "Component-wise modeling of articulated objects". *In Proceedings of the IEEE International Conference on Computer Vision (ICCV)*, pp. 2327-2335, 2015.
10. Natola F., Ntouskos V., **Sanzari M.**, Pirri F., "Bayesian non-parametric inference for manifold based mocap representation". *In Proceedings of the IEEE International Conference on Computer Vision (ICCV)*, pp. 4606-4614, 2015.

PARTICIPATION TO CONFERENCES AND SUMMER SCHOOLS

- *British Machine Vision Association* - Swansea University, Swansea, UK, 2014
- *Conference on Intelligent Robots and System (IROS)*, Hanburg, Germany, 2015.
- *International Conference on Computer Vision (ICCV)*, Santiago de Chile, Chile, 2015.
- *International Conference on Computer Vision (ICCV)*, Venice, Italy, 2017.

TEACHING EXPERIENCE

Teaching Assistant

- *Introduction to Pattern Recognition* 2016
Instructor: prof. Fiora Pirri
Department of Computer, Control and Management Engineering
La Sapienza University of Rome
Main subjects: image processing, features detection, image segmentation, 3D reconstruction, 3D modeling
- *Vision and Perception* 2017
Instructor: prof. Fiora Pirri
Department of Computer, Control and Management Engineering
La Sapienza University of Rome
Main subjects: 2D and 3D projective geometry, 3D reconstruction
- *Vision and Perception* 2018
Instructor: prof. Fiora Pirri
Department of Computer, Control and Management Engineering
La Sapienza University of Rome
Main subjects: machine learning, deep learning

Lecturer

- *Analisi di reti sociali* 2023
Master Social Museum and Smart Tourism
Università IUAV di Venezia
SSD ING-INF/05 INF/01

COMPUTER SKILLS

- Languages: Python, MATLAB, C++, Java, Prolog, R
- Libraries: OpenGL, PCL, TensorFlow
- Operative System: Windows, Linux Ubuntu
- Robot middle-ware: ROS, Rviz, Stage
- Tools: Office, Latex, Visual Studio, Eclipse, Adobe, Blender

LANGUAGES

- Italian: mother language
- English: fluent spoken and written