Carlo Centofanti

Curriculum Vitae



□ carlo.centofanti1@univaq.it in Linkedin

Dr. Carlo Centofanti is an Assistant Professor in the Department of Information Engineering, Computer Science, and Mathematics at the University of L'Aquila, Italy. He earned both his M.Sc. in Computer and Systems Engineering and his Ph.D. in Information and Communications Technology from the same institution. He has actively contributed to ECSEL-RIA AfarCloud Project (GA: 783221), and is actively contributing to MSCA-RISE OPTIMIST Project (GA: 872866), SNS-SEASON Project (GA: 101096120), and PNRR-funded SPRINT Project, which focuses on security for network and service management platforms in edge computing environments, particularly in Multi-Access Edge Computing (MEC). He spent almost one year in Secondment at Iquadrat Informatica S.L. (Barcelona) in the context of the OPTIMIST Project exchange, where he developed industrial and practical skills. He actively participates in the TPC of IEEE Communications Society conferences, served as TPC Chair of the Next-Generation Multimedia Services at the Edge: Leveraging 5G and Beyond (NGMSE 2024) workshop, and is the Chair of NGMSE 2025. Additionally, he is a member of the organizing committee of the Internet of Sounds (IS2 2025) conference. He performs research on Software-Defined Networking (SDN), Network Virtualization, Multi-Access Edge Computing (MEC), Power Consumption, and Cloud Computing.

Education

- 2023 **Ph.D., Information and Communications Technology**, *University of L'Aquila*, L'Aquila, Italy. Multi-Access Edge Computing: Performance Optimization via Orchestration and Virtualization
- 2019 M.Sc. Computer and Systems Engineering, University of L'Aquila, L'Aquila, Italy. Thesis: LabSMILING: A remote accessible framework for analysis, design and test of LR-WPAN based on IEEE 802.15.4
- 2016 B.Sc. Computer and Systems Engineering, University of L'Aquila, L'Aquila, Italy. Thesis: Analisi ed estensione di uno strumento per il monitoraggio e la verifica del protocollo di rete 802.15.4

Research Experience

- Nov. 2024 Assistant Professor, University of L'Aquila, L'Aquila, Italy.
 - present Conducting research within the SPRINT project, focusing on security for network and service management platforms in edge computing environments, particularly in Multi-access Edge Computing (MEC). The work involves integrating advanced security paradigms into modern telecommunications infrastructures. Engaged in teaching activities, delivering 60 hours of lectures per year and contributing to student support through thesis supervision, curriculum development, and outreach initiatives.
- Jul. 2023 Postdoctoral Researcher, University of L'Aquila, L'Aquila, Italy.
- Oct 2024 Research on network-aware orchestration of extended reality (XR) services at the edge, focusing on computation offloading and resource management. Development and testing of network control mechanisms and orchestration algorithms using platforms like NVIDIA CloudXR, Kubernetes, OSM, and SDN controllers such as Teraflow and ONOS. Collaboration with national and international research institutions.
- Jun. 2024 *Visiting researcher, secondee*, *Iquadrat Informatica S.L.*, Barcellona, Spain.
- Sep. 2024 MSCA-RISE OPTIMIST Project

Nov. 2019 - Laboratory Setup and Management, MECLAB, University of L'Aquila, L'Aquila, Italy.

present Design and setup of the Multi-Access Edge Computing Lab at the University of L'Aquila, funded by the INCIPICT research project. The lab offers the possibility to perform experimental research by the means of prototypal and commercial technologies. Experimental activites performed in the lab include, but are not limited to: 4G/5G emulation; Network Slicing; Multi-Access Edge Computing, Energy Sustainability.

- Jul. 2023 **Visiting researcher, secondee**, Iquadrat Informatica S.L., Barcellona, Spain. Oct. 2023 MSCA-RISE OPTIMIST Project
- May. 2022 Research Grant, University of L'Aquila, L'Aquila, Italy.
- Jun. 2023 Research on network service orchestration reliability strategies, focusing on NFV and MEC architectures. Implementation of Data-Plane protection strategies using NetFPGA hardware. Initiated VMware IT Academy partnership. Co-supervision of Bachelor and Master theses. Seminar activities in many courses at DISIM.
- Jan. 2023 Visiting researcher, secondee, Iquadrat Informatica S.L., Barcellona, Spain.
- Feb. 2023 MSCA-RISE OPTIMIST Project
- Jul. 2022 Visiting researcher, secondee, Iquadrat Informatica S.L., Barcellona, Spain.
- Sep. 2022 MSCA-RISE OPTIMIST Project
- May. 2021 **Research Fellow**, DISIM Department University of L'Aquila, L'Aquila, Italy. Apr. 2022 "Analisi e progettazione di sistemi SDN cloud based cyber-sicuri"
- Aug. 2020 Research Fellow, DISIM Department University of L'Aquila, L'Aquila, Italy.
- Apr. 2021 "Realizzazione di un laboratorio virtuale per i test di sicurezza nell'ambito del progetto CYBER TRAINER"
- Feb. 2017 Research Fellow, Center of Excellence DEWS University of L'Aquila, L'Aquila, Italy.
- Lug. 2020 "Strumenti EDA (Electronic Design Automation) per Networked Embedded System"
- 2017 2020 *Laboratory Setup and Management*, *LabSMILING*, *Center of Excellence DEWS University of L'Aquila*, L'Aquila, Italy.

Design and setup of the LabSMILING Lab at the University of L'Aquila. The lab offers the possibility to perform experimental research on embedded devices by the means of prototypal and commercial sensor boards. The lab is completely accessible by remote, through a web interface. Experimental activites performed in the lab include, but are not limited to: firmware testing, 802.15.4 protocol stack analysis, LoraWAN experimentation, firmware prototipation and testing for heterogeneous embedded devices.

Other Professional Experiences

- Apr. 2025 **Senior Consultant**, *Mr. Wolf s.r.l.*, Consulency on Serverless & Cloud Native application design Present and implementation.
- Jan. 2024 Senior Consultant, *Mr. Wolf s.r.l.*, Consulency on Serverless & Cloud Native application design Dec. 2024 and implementation.
 - 2021 Freelance Trainer, Reiss Romoli, L'Aquila, Italy.
 - present Trainer for corporate courses within the "TIM Academy", including "5G and the evolution toward 6G". Instructor for employees of companies such as e-GEOS, Leonardo S.p.A., Telespazio, Reply, and NTT Data on containerization and orchestration (Docker, Docker Compose, Docker Swarm), Kubernetes architecture, cluster operations, and Kubernetes object management. Delivered training modules on Java programming, Spring and Spring Boot frameworks, microservice architecture design, and networking fundamentals for cloud-native systems.
- 2022 2023 Consultant, Reiss Romoli, L'Aquila, Italy.

Consultant for the iFaseNet project on behalf of Reiss Romoli. Responsible for the design and implementation of network orchestration strategies within a secure, cloud-native infrastructure for distributed systems. Contributed to the software architecture and network design, with activities including system requirements definition, DevOps pipeline support, and the deployment of container-based orchestration technologies in critical environments.

- Jun. 2018 Freelance Consultant and Trainer, *BiTE s.r.l.*, L'Aquila, Italy.
- Dec. 2023 Software architecture consulting and training. Lecturer in Software Engineering Fundamentals, Distributed Systems Architectures, and Internet Protocols and Wireless Networks.
- 2020 2022 **Corporate Trainer (on behalf of NTT Data and other clients)**, *Reiss Romoli*, L'Aquila, Italy. Delivered training courses for NTT Data and other major tech companies on Java, Python, Spring, Spring Boot, microservices, software architectures, and AWS cloud technologies.
 - Jun. 2019 Freelance Lecturer, Istituto Europeo Terzo Millennio, Rome, Italy. Webinar-based training on "React/Redux - base" and "React/Redux - advanced" modules for the "FRONT END 1" course delivered to NTT.

Feb. 2019 Assistant Lecturer, Istituto Europeo Terzo Millennio, Rome, Italy. Delivered the "Docker & Kubernetes" module in the "Java Academy for Public Administration Project" training program.

Publications

Journal Articles

- J1 Pedro Castillejo a, Gorm Johansen b, Baran Cürüklü c, Sonia Bilbao-Arechabala d, Roberto Fresco e, Belén Martínez-Rodríguez d, Luigi Pomante f, Cristina Rusu g, José-Fernán Martínez-Ortega a, **Carlo Centofanti**, f, Mikko Hakojärvi h, Marco Santic f, Johanna Häggman h. Aggregate Farming in the Cloud: The AFarCloud ECSEL project. *Microprocessors and Microsystems*, Volume 78, October 2020, 103218, pages 176624–176633. Springer US, 2020.
- J2 Claudia Rinaldi, Fabio Franchi, Andrea Marotta, Fabio Graziosi, and **Carlo Centofanti**. On the exploitation of 5G multi-access edge computing for spatial audio in cultural heritage applications. *IEEE Access*, Volume 9, pages 155197–155206. IEEE, 2021.
- J3 Carlo Centofanti, José Santos, Venkateswarlu Gudepu, Koteswararao Kondepu. Impact of power consumption in containerized clouds: A comprehensive analysis of open-source power measurement tools. *Computer Networks*, Volume 245, pages 110371. Elsevier, 2024.
- J4 Carlo Centofanti, Andrea Marotta, Venkateswarlu Gudepu, Dajana Cassioli, Fabio Graziosi, Hal Roberts, Chris Bernard, Koteswararao Kondepu. End-to-end slicing of RAN based on next-generation optical access network. *Photonic Network Communications*, pages 1–9. Springer US, 2024.
- J5 Luca Turchet, Claudia Rinaldi, **Carlo Centofanti**, Luca Vignati, Cristina Rottondi. 5G-Enabled Internet of Musical Things Architectures for Remote Immersive Musical Practices. *IEEE Open Journal of the Communications Society*. IEEE, 2024.
- J6 **Carlo Centofanti**, Walter Tiberti, Andrea Marotta, Fabio Graziosi, Dajana Cassioli. Taming latency at the edge: A user-aware service placement approach. *Computer Networks*, Volume 247, pages 110444. Elsevier, 2024.

In Conference Proceedings

- C1 Carlo Centofanti; Luigi Pomante; Marco Santic. LabSMILING: A SaaS Framework, Composed of a Number of Remotely Accessible Testbeds and Related SW Tools, for Analysis, Design and Management of Low Data-Rate Wireless Personal Area Networks Based on IEEE 802.15.4. In 2019 8th Mediterranean Conference on Embedded Computing (MECO), IEEE, 2019.
- C2 Federica Caruso, Sara Peretti, Lara Corbacchini, Carlo Centofanti, Alessandro D'Errico. The CrazySquare Project: A Technological Pedagogical Content Knowledge Solution. Autori . In CSEDU, pages 655–662. 2020.
- C3 **Carlo Centofanti**, Alessandro D'Errico, Federica Caruso, Sara Peretti. The crazysquare solution: a gamified ICT tool to support the musical learning in pre-adolescents. In *Proceedings of the International Conference on Advanced Visual Interfaces*, pages 1–3, ACM 2020.
- C4 C. Centofanti, A Marotta, C Rinaldi, F Franchi, D Cassioli, F Graziosi. Improved dash video streaming performance by mec-enabled optical access. In 2021 Asia Communications and Photonics Conference (ACP), pages 1–3. IEEE, 2021.
- C5 **Carlo Centofanti**, Andrea Marotta, Dajana Cassioli, Fabio Graziosi, Nicola Sambo, Luca Valcarenghi, Chris Bernard, Hal Roberts. Slice management in SDN PON supporting low-latency services. In *European Conference and Exhibition on Optical Communication*. Optica Publishing Group, 2022.
- C6 Gioacchino Castorio, **Carlo Centofanti**, Andrea Marotta, Fabio Graziosi. On P4-based Reliability: Path Protection for Programmable Data Planes. In *2022 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS)*, pages 393–397. IEEE, 2022.

- C7 Carlo Centofanti, Andrea Marotta, Dajana Cassioli, Fabio Graziosi, Venkateswarlu Gudepu, Koteswararao Kondepu. End-to-end slicing via o-ran and software defined optical access. In Optical Fiber Communication Conference. Optica Publishing Group, 2023.
- C8 **C. Centofanti**, W Tiberti, A Marotta, F Graziosi, D Cassioli. Latency-Aware Kubernetes Scheduling for Microservices Orchestration at the Edge. In *2023 IEEE 9th International Conference on Network Softwarization (NetSoft)*, pages 426–431. IEEE, 2023.
- C9 Dionysis Xenakis, **Carlo Centofanti**, Claudia Rinaldi, Andrea Marotta, Christos Verikoukis, Nikos Passas, Stefano Tennina, Dajana Cassioli. OPTIMIST: OPTIMised video content delivery chains over joint multl-accesS edge computing and 5G radio network infrasTructures. In *2023 26th Euromicro Conference on Digital System Design (DSD)*, pages 415–421. IEEE, 2023.
- C10 A Marotra, C Rinaldi, C. Centofanti, K Kondepu, D Cassioli, F Graziosi. O-RAN Neutral Hosting as a Viable Solution for First Responders Seamless Connectivity. In 2023 International Conference on Information and Communication Technologies for Disaster Management (ICT-DM), pages 1–4. IEEE, 2023.
- C11 L Valcarenghi, A Marotta, C. Centofanti, F Graziosi, K Kondepu. A Cooperative Energy Saving Scheme for NG-PON2-Based 5G X-Haul. In 2023 International Conference on Photonics in Switching and Computing (PSC), pages 1–3. IEEE, 2023.
- C12 Federico Martusciello, **Carlo Centofanti**, Claudia Rinaldi, Andrea Marotta. Edge-Enabled Spatial Audio Service: Implementation and Performance Analysis on a MEC 5G Infrastructure. In 2018 IEEE 4th International Forum on Research and Technology for Society and Industry (2023 4th International Symposium on the Internet of Sounds, pages 1–4, IEEE 2023.
- C13 Marco Giordano, Claudia Rinaldi, Carlo Centofanti, Andrea Marotta. On the perception of urgency in audition: sound design of an early warning alarm. In 2023 4th International Symposium on the Internet of Sounds, pages 1–6. IEEE, 2023.
- C14 A Marotta, K Kondepu, C. Centofanti, S Arnaout, A Bhattacharyya, C Rinaldi, F Graziosi, D Cassioli. Performance Evaluation of MEC-enabled Fiber To The Room Architecture. In International Conference on Advanced Networks and Telecommunications Systems (ANTS). IEEE, 2023.
- C15 Venkateswarlu Gudepu, Bhargav Chirumamilla, Rajashekhar Reddy Tella, Abhishek Bhattacharyya, Shubh Agarwal, Lavanya Malakalapalli, Carlo Centofanti, José Santos, Koteswararao Kondepu. EARNEST: Experimental Analysis of RAN Energy with Open-Source Software Tools. In 2024 16th International Conference on COMmunication Systems & NETworkS (COMSNETS), pages 1148–1153. IEEE, 2024.
- C16 A Marotta, L Valcarenghi, K Kondepu, C. Centofanti, C Rinaldi, F Graziosi, D Cassioli. Fiber To The Room Challenges and Opportunities. In 2024 16th International Conference on COMmunication Systems & NETworkS (COMSNETS), pages 1139–1142. IEEE, 2024.
- C17 V Gudepu, RR Tella, C Centofanti, J Santos, A Marotta, K Kondepu. Demonstrating the Energy Consumption of Radio Access Networks in Container Clouds. In NOMS2024, the IEEE/IFIP Network Operations and Management Symposium, IEEE, 2024.
- C18 Alessandro Pacini, Andrea Sgambelluri, Carlo Centofanti, Andrea Marotta, Emilio Paolini, Alessio Giorgetti, Luca Valcarenghi. Hierarchical Software-Defined Control for coordinated RAN and PON-based Transport Scaling. In NOMS2024, the IEEE/IFIP Network Operations and Management Symposium, IEEE, 2024.

Other Publications

O1 L. Valcarenghi, A. Marotta, **C. Centofanti**, F. Graziosi, J. C. Borromeo, and K. Kondepu, *Optical Access for 5G and B5G*, In *CNIT Technical Report Advances in Optical Communications: from Integrated Photonics to Optical Systems and Network*, Dec. 2023.

Editorial and Conference activities

Reviewer Activities

2025 – TPC Chair, IS2 - IEEE 6th International Symposium on the Internet of Sounds.

present

2025 – **TPC Member**, 1st IEEE/IFIP Workshop on WebAssembly, Cloud and Edge: Shaping the Future present of Computing (WACE).

2024 – **TPC Chair**, *NGMSE 2024 workshop - Next-Generation Multimedia Services at the Edge:* present *Leveraging 5G and Beyond*.

2020 – **Reviewer**, *Elsevier*, > 10 reviews.

present

2020 – **Reviewer**, Optica, > 2 reviews.

present

2020 - Reviewer, > 5 reviews, Springer.

present

Conference Activities

- 2024 Workshop Organizer & TPC Chair, Next-Generation Multimedia Services at the Edge: Leveraging 5G and Beyond (NGMSE) Colocated with the 29th IEEE Symposium on Computers and Communications (ISCC 2024).
- 2023 2024 **Technical programme committee member**, IEEE 5th International Symposium on the Internet of Sounds (IS2).
- 2023 2024 **Technical programme committee member**, IEEE Global Communications Conference (GLOBECOM).
- 2023 2024 **Technical programme committee member**, IEEE International Conference on Communications (ICC).
- 2022 2024 **Technical programme committee member**, Wireless Communications and Networking Conference (WCNC).
- 2019 2021 Technical programme committee member, IEEE 5G World Forum (WF-5G).
- 2018 2019 **Technical programme committee member**, IEEE International Forum on Research and Technologies for Society and Industry (RTSI).
 - 2019 **Session chair**, IEEE International Conference on Computing, Networking and Communications (ICNC).

Awards

- 2024 **Best Paper Award**, *1st International Workshop on the Musical Metaverse*, C. Rinaldi, C. Centofanti, The Musical Metaverse: Advancements and Applications in Networked Imersive Audio.
- 2024 **Best Demo Award**, 5th IEEE International Symposium on the Internet of Sounds, Mauro Galbiati, Nicola Gualandris, Federico Laini, Tiziano Salvi, and Carlo Centofanti, Remote Immersive Audio Production.
- 2023 Best Student Paper Award, 1st International Workshop on Networked Immersive Audio, F. Martusciello, C. Centofanti, C. Rinaldi, A. Marotta, Edge-Enabled Spatial Audio Service: Implementation and Performance Analysis on a MEC 5G Infrastructure.
- 2022 Seasonal School Merit Award, Fondazione "Il talento all'opera", Merit award for having ranked among the top three students of the course in the final evaluation. (1st).

- 2017 **First L'Aquila International PLANET WARS Competition**, *Università degli Studi dell'Aquila*, Computational Intelligence in Games and Virtual Reality Top eight tier reached with a bot called CarloBot in an international 34 players tournament., https://challonge.com/it/1m1t694g.
- 2017 **1° Summer Virtual Reality Hackathon**, *Università degli Studi dell'Aquila*, Università degli Studi dell'Aquila Living Lab @ DISIM-UnivAQ Second prize with the team DR1 (2 members)..
- 2017 **22° Olimpiade Italiana della Fisica (2008)**, *Associazione per l'insegnamento della Fisica*, Winner of the local round..
- 2008 **Progetto EEE (Extreme Energy Events) (2008)**, CERN Ginevra Centro Fermi Roma Laboratori di Fisica Nucleare Gran Sasso, Partecipation in the project..
- 2008 Concorso "Anch'io Scienziato" (2008), Laboratori di Fisica Nucleare Gran Sasso, First placed..

Project activities

- Nov. 2024 **RESTART Supporting Project to Restart on Intelligent Networks for Telecommunica**present **tions**, Cascade Call Programma PE RESTART - RESearch and innovation on future Telecommunications systems and networks, to make Italy more smART, Researcher.
- Mar. 2024 SPRINT Supporting Project to Restart on Intelligent Networks for Telecommunications, present Cascade Call Programma PE RESTART - RESearch and innovation on future Telecommunications systems and networks, to make Italy more smART, Researcher.
- Dec. 2023 GASTON Green, Autonomic, and reSilienT Optical multi-core Networks, Progetti di present Rilevante Interesse Nazionale (PRIN), Researcher.
- Jul. 2022 VITALITY Innovation, digitalisation and sustainability for the diffused economy in Central present Italy, European Union - NextGenerationEU under the Italian Ministry of University and Research (MUR) National Innovation Ecosystem grant, Researcher.
- May. 2020 **OPTIMIST OPTIMised video content delivery chains leveraging data analysis over joint** present **multI-accesS edge computing and 5G radio network infrasTructures**, *MSCA-RISE-2019 -Research and Innovation Staff Exchange, grant 872866*, Researcher.
- Feb. 2020 **FIRST Fiber Infrastructure for Research on Space-Division Multiplexed Transmission**, present *Progetti di Rilevante Interesse Nazionale (PRIN)*, Researcher.
- Apr. 2022 INCIPICT Innovating City Planning through Information and Communications Technolopresent gies, supported by the Italian Government under CIPE resolution no. 135 (December 21, 2012), Researcher.
- Jul. 2020 CYBERTRAINER, supported by Abruzzo Region POR FESR Abruzzo 2014-2020 Asse I
- Nov. 2021 Determinazione n. 35 DPG013 del 30/11/2017, Researcher.
- Jun. 2019 FITOPTIVIS From the cloud to the edge smart IntegraTion and OPtimization
- Nov. 2021 Technologies for highly efficient Image and VIdeo processing Systems., *H2020-EU.2.1.1.7.* - *ECSEL*, grant n. 783162, Researcher.
- Nov. 2018 AFARCLOUD Aggregate Farming in the Cloud., *H2020-EU.2.1.1.7. ECSEL*, grant n. Nov. 2021 783221, Researcher.
- Mag. 2018 **MEGAMART2 MegaModelling at Runtime scalable model-based framework for** Mar. 2020 **continuous development and runtime validation of complex systems.**, *H2020-EU.2.1.1.7. -ECSEL*, grant n. 737494, Researcher.
- Feb. 2017 SAFECOP Safe Cooperating Cyber-Physical Systems using Wireless Communication, Jun. 2019 H2020-EU.2.1.1.7. - ECSEL, grant n. 692529, Researcher.

Teaching

Teaching Activities

	Advanced and Software Defined Networks , <i>ING-INF/03</i> , Seminar on Network Virtualization, and Virtualization Technologies. (30 hours)
A.Y. 2023/2024	Cyberchallenge.it , Networking, Virtualization, and Network Virtualization. (12 hours)
A.Y. 2022/2023	Cyberchallenge.it , Networking, Virtualization, and Network Virtualization. (12 hours)
	Advanced and Software Defined Networks , <i>ING-INF/03</i> , Seminar on Network Virtualization, and Virtualization Technologies. (9 hours)
	Software Architectures , <i>ING-INF/03</i> , Seminar on Virtualization: Docker, Kubernetes, and Cloud Native patterns, University of L'Aquila. (3 hours)
	Advanced and Software Defined Networks , <i>ING-INF/03</i> , Seminar on Network Virtualization, and Virtualization Technologies. (9 hours)
A.Y. 2021/2022	Cyberchallenge.it , Networking, Virtualization, and Network Virtualization. (12 hours)
	Software Engineering , <i>INF/05</i> , Seminar on Virtualization: Docker, Kubernetes, and Cloud Native patterns, University of L'Aquila. (4 hours)
	Advanced Computer Networks: Internetworking , <i>INF/01</i> , Seminar on SDN and Homelab assignment, University of L'Aquila. (4 hours)
	Advanced Computer Networks: Internetworking , <i>INF/01</i> , Seminar on SDN and Homelab assignment, University of L'Aquila. (4 hours)
	Master's Theses and Bachelor's Theses
2025	Advisor, <i>Giuseppe Corraro</i> , Concepts, tools, and techniques for observability in datacenter environments.
2024	Advisor , <i>Gianluca Ciaglia</i> , Energy Sustainability in Virtualized Infrastructures: Strategies for Efficient Management of Cloud and HPC.
2024	Advisor , <i>Giacomo Alfani</i> , Remote Attestation Service in Confidential Computing: Ensuring Trust and Security in Virtualized Environments.
2024	Advisor, Marta Paciotti, A GenAl Framework for Intelligent Error Management in Cloud Services.
2024	Co-Advisor , <i>Mehdi Mekhatria</i> , Anomaly detection in O-RAN mobile networks, M.Sc. Telecom- munications Engineering.
2024	Co-Advisor , <i>Matteo Angelucci</i> , Effetti degli scenari audio sulla percezione e sull'Immersione dell'utente in realt'a virtuale, B.Sc. Information Engineering.
2024	Advisor , <i>Davide Lauterio</i> , Resilienza dei Dati: Prototipazione di un Cyber Recovery Vault, M.Sc. Software Engineering.
2023	Advisor , <i>Ibrahim Ramadan</i> , Performance Evaluation of Kubernetes Orchestration Platforms, M.Sc. Telecommunications Engineering.
2023	Co-advisor , <i>Christian Felicione</i> , Sicurezza nell'High Performance Computing: Ruolo dei Container, B.Sc. Computer Science.

- 2022 **Co-advisor**, *Omar Mayou*, Hardware Implementation of a Reliability Strategy for Programmable Data Plane, M.Sc. Telecommunications Engineering.
- 2022 **Co-advisor**, *Lorenzo Salvi*, Hardware Implementation of a Reliability Strategy for Programmable Data Plane, B.Sc. Computer Science.
- 2022 **Co-advisor**, *Antonio Di Luca*, O-RAN: Vulnerability Assestment e Analisi dei Dati, B.Sc. Information Engineering.
- 2022 **Co-advisor**, *Gioacchino Castorio*, Study and Implementation of reliability strategies for Programmable Data Plane Networks, M.Sc. Telecommunications Engineering.
- 2022 **Co-advisor**, *Stefano Hinic*, Controllo Software Defined di una Rete Ottica Passiva, B.Sc. Information Engineering.
- 2022 **Co-advisor**, *Piero Ferri*, Test di Trasmissione di Contenuti ad Alta Risoluzione Tramite DASH, B.Sc. Computer Scuence.
- 2021 **Co-advisor**, *Marco De Luca*, Studio e implementazione di aspetti di availability in ambiente OSM per un servizio video, B.Sc. Information Engineering.
- 2021 **Co-advisor**, *Lorenzo D'Amico*, Studio e implementazione di aspetti di workload management in ambiente OSM per un servizio video, B.Sc. Information Engineering.
- 2021 **Co-advisor**, *Alessia Mammarella*, Studio del protocollo DASH su rete 5G, B.Sc. Information Engineering.
- 2021 **Co-advisor**, *Lucia Torlone*, Analisi e sviluppo di un sistema di spazializzazione sonora basato su 5G, B.Sc. Information Engineering.
- 2020 **Co-advisor**, *Valerio Omogrosso*, Studio di uno scenario di network slicing ed emulazione mediante framework open-source, B.Sc. Information Engineering.

Service Activities to the Atheneum

2025 – Member, "Docente di riferimento per il Corso di Laurea I4D".

- present
- 2024 **Member**, "Commissione orientamento area Ingegneria dell'Informazione @DISIM". present
- 2022 Local Coordinator, VMware IT Academy.
- present
- 2021 Teacher of Network Security, Cyberchallenge National Initiative.
- present
- 2019 **Accredited Educator**, *AWS Academy Amazon Web Services Academy program*. present

Training

- 2024 Cloud, Associate, Juniper.
- 2024 Automation and DevOps, Associate, Juniper.
- 2022 IT Academy: Cloud and Virtualization Concepts, VMware.
- 2022 IT Academy: Network Virtualization Concepts, VMware.
- 2022 IT Academy: Software Defined Storage Concepts, VMware.
- 2022 **ARTIST 5G/6G NETWORKS TRANSFORMING THE DIGITAL SOCIETY**, PhD Summer School.
- 2022 Lipari School on Advanced Networking Systems: Programmability, Security, and Algorithmic Challenges in Future Networks, PhD Summer School.
- 2021 Splunk 7.x Fundamentals Part 1, Splunk.
- 2021 Machine Learning over Networks PhD ICT Seminars, Università degli Studi dell'Aquila.

- 2021 Computing in Communication Networks From Theory to Applications /IEEE Certificates Program (CEU/PDH), IEEE Educational Activities.
- 2021 Cloud-Native 5G: Architectures, Enablers, and Roadmap | IEEE Online Training (CEU/PDH), IEEE Educational Activities.
- 2020 AWS Academy Accredited Educator, Amazon Web Services (AWS).
- 2020 AWS Certified Cloud Practitioner, Amazon Web Services (AWS).
- 2021 CISCO CCNA Exploration: Network Fundamentals, Cisco Networking Academy, Università degli Studi dell'Aquila.

Networks and memberships

- 2019 IEEE Institute of Electrical and Electronics Engineers.
- current IEEE Membership; IEEE Communications Society Membership; IEEE Computer Society Membership; IEEE Young Professionals; IEEE Women in engineering

Autorizzo il trattamento dei dati personali presenti nel CV ai sensi del D. Lgs. 2018/101 e del GDPR (Regolamento UE 2016/679)