

PERSONAL INFORMATION Mattia Merluzzi

WORK EXPERIENCE

2017-2020- PhD student in Information and Communication Technologies
Sapienza University of Rome
Title of the research: Dynamic Edge Computing and Learning
Visiting CEA-LETI, Grenoble, from March until September 2019

May-November 2017 Student of the research grant "Millimeter-wave edge cloud"
Sapienza University of Rome
Research grant for studies related to the EU/JAP H2020 project 5G-Miedge, whose aim is to couple Multi-Access Edge Computing (MEC) with mmWave communications to enable the 5G ecosystem

October-December 2015 Junior Consultant
HSI Consulting srl
Measurements and data analysis on site for the energy audit of radio base stations for the mobile network of H3G. My role in the project was to collect, analyze data and develop modeling to validate and improve power efficiency of radio base stations.

EDUCATION AND TRAINING

January 2015- March 2017 Master Degree in Telecommunications Engineering

Sapienza University of Rome
Final grade 110/110 cum Laude
Thesis: Multilink millimeter wave technologies for 5G Mobile Edge Computing
Tutor professor: Sergio Barbarossa

September 2011- December 2014 Bachelor Degree in Electronics Engineering

Sapienza University of Rome
Final grade 110/110 cum Laude
Thesis: Channel capacity of multiple access systems
Tutor professor: Maria-Gabriella Di Benedetto

2006-2011 Scientific High School Diploma

Liceo Scientifico Statale Taletè, Rome

PUBLICATIONS

- **M. Merluzzi**, P. Di Lorenzo, S. Barbarossa, and V. Frascolla, "Dynamic Computation Offloading in Mobile Edge Computing via Ultra-Reliable and Low Latency Communications," in IEEE Transactions on Signal and Information Processing over Networks, vol. 6, pp. 342-356, 2020
- **M. Merluzzi** P. Di Lorenzo, S. Barbarossa, "Dynamic Resource Allocation for Wireless Edge Machine Learning with Latency And Accuracy Guarantees," Proc. of IEEE ICASSP 2020, Barcelona, Spain, May 2020
- **M. Merluzzi**, N. di pietro, P. Di Lorenzo, E. Calvanese Strinati, S. Barbarossa, "Network energy efficient mobile edge computing with reliability guarantees," Proc. of IEEE GLOBECOM 2019, Waikoloa, Hawaii, USA, December 2019
- **M. Merluzzi**, P. Di Lorenzo, S. Barbarossa, "Dynamic Joint Resource Allocation and user assignment in Multi-Access Edge Computing," Proc. of IEEE ICASSP 2019, Brighton, UK, May 2019
- **M. Merluzzi**, P. Di Lorenzo, S. Barbarossa, "Joint Resource Allocation for Latency-Constrained Dynamic Computation Offloading with MEC," Proc. of IEEE WCNC 2019, Marrakech, Morocco, April 2019
- **M. Merluzzi**, P. Di Lorenzo, S. Barbarossa, "Latency-Constrained Dynamic Computation Offloading with Energy Harvesting IoT Devices," Proc. of IEEE INFOCOM 2019, Paris, France, April 2019
- S. Sardellitti, F. Costanzo, **M. Merluzzi**, "Joint optimization of caching and transport in proactive edge cloud," Proc. of EUSIPCO 2018, Rome, Italy, September 2018
- S. Sardellitti, **M. Merluzzi**, S. Barbarossa, "Optimal association of mobile users to multi-access edge computing resources," Proc. of IEEE International Conference on Communications (ICC), Kansas City, MO, USA, May 2018
- S. Barbarossa, E. Ceci, **M. Merluzzi**, "Overbooking Radio and Computation Resources in mmW-Mobile Edge Computing to Reduce Vulnerability to Channel Intermittency," Proc. of European Conference on Networks and Communications (EUCNC), Oulu, Finland, 2017
- S. Barbarossa, E. Ceci, **M. Merluzzi**, E. Calvanese-Strinati, "Enabling effective mobile edge computing using millimeter wave links," Proc. of IEEE International Conference on Communications (ICC), Paris, France, 2017
- S. Barbarossa, Stefania Sardellitti, E. Ceci, **M. Merluzzi**, "The edge cloud: A holistic view of communication, computation and caching," Chapter 16 of "Cooperative and Graph Signal Processing: Principles and Applications", P. Djuric and C. Richard Eds., Academic Press, Elsevier, 2018

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Extracurricular experiences

- Volunteer for wild life conservation at Leo Africa, South Africa (2019)
- Private tutor for high school and University students, Subjects: Mathematics, Physics, Statistics
- Active Participant: National High School Model United Nations New York Conference, New York, USA, 2010

Computer skills

Advanced knowledge of Microsoft Windows and Mac OS environments, Office package, Matlab, LATEX

Ai fini della pubblicazione in ottemperanza all'art. 15 del D.Lgs 33/2013