

Personal information



Michele Rossi

📍 via Gradenigo 6/b, 35131, Padova, Italy (IT)

📞 +39 049 827 7915

✉️ rossi@dei.unipd.it

🌐 <http://www.dei.unipd.it/~rossi>

Gender Male | Date of birth 30 October 1974

[h-index](#) 27 | [tot-citations](#) 2525 | [i10-index](#) 57 (source [Google Scholar](#))

POSITION

Assistant Professor

Department of Information Engineering, University of Padova, IT

SHORT BIO

Dr. Rossi is an Assistant Professor with the Department of Information Engineering (DEI), UniPD, IT. His research interests include stochastic modeling, optimization and protocol design for Wireless Sensor Networks (WSN) and Internet of Things (IoT), with focus on wearable IoT devices for smart health applications. He is the author of more than 100 scientific papers published in International conferences, book chapters and Journals, two patents (with DOCOMO) and has been the recipient of four best paper awards from the IEEE. Since 2005, Dr. Rossi has led the research activity on Internet of Things (IoT) @ DEI. In 2005–2009, he has collaborated with the Ubiquitous Networking Research group @ DOCOMO Euro-Labs (Munich, Germany) in the design of distributed processing, storage and data dissemination for ad hoc networks. Since 2010, he has been working with Worldsensing (<http://www.worldsensing.com>) on optimized WSN solutions for Smart Cities, designing and implementing software for over-the-air reprogramming and, lately, performing research on temporal compression and energy harvesting WSN. Since 2002, he has been involved in numerous EU projects on WSN/IoT, among which we cite EYES (protocols for energy efficient WSN, 2002-2005), e-SENSE (protocols and architectures for WSN, 2004-2007), SENSEI (WSN as enablers of the future Internet, 2007-2010), SWAP (Marie Curie, Symbiotic Wireless Autonomous Powered systems, 2010-2014). He has been the technical coordinator of the protocol design activity carried out in the EU IOT-A project (Internet of Things Architectures, 2010-2013), the PI of MOSAIC ("MONitoring Sensor and Actuator networks through Integrated Compressive Sensing and data gathering", 2010-2012) and has recently received a Samsung GRO award on signal compression for wearable IoT devices (2014-2015). His current research is supported by the European Commission through the H2020 MSCA-ITN project SCAVENGE on Energy Harvesting Cellular Networks. Dr. Rossi is currently Associate Editor of IEEE Transactions on Wireless Communications, has been on the TPC of 80+ international conferences and serves as reviewer for prestigious scientific Journals of IEEE, ACM, Springer and Elsevier. Dr. Rossi is a Senior Member of the IEEE.

WORK EXPERIENCE

2005 – Present

Assistant Professor @ DEI, University of Padova, IT

Teaching (Wireless Systems / Sensor Networks) – PhD supervision

Project management (EU, industrial collaborations: DOCOMO, WorldSensing, SAMSUNG)

2004 – 2005

Postdoc at the University of Ferrara, IT

Research on Wireless Sensor Networks

Project management (EU, local projects)

2000 – 2004

PhD student at the University of Ferrara, IT

Research on TCP congestion control, UMTS, ARQ, HARQ processes)

Industrial collaborations (ERICSSON, European Space Agency (ESA))

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	Proficient C1/2	Proficient C1/2	Proficient C1/2	Proficient C1/2	Proficient C1/2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference (CEF) level

Communication skills very good, gained through my teaching experience and through my experience as a project manager (since 2004) at EU level and with major industries (ERICSSON, DOCOMO, ESA, SAMSUNG)

Organisational

- project management at technical and administrative levels
- leadership (currently supervising: 4 PhD students, 2 postdocs, several MS students)

Computer skills

- very good knowledge of the Latex document preparation system
- very good knowledge of Matlab and Mathematica scientific languages
- very good knowledge of Linux systems, network programming, C/C++ programming
- good knowledge of HTML, CSS, Web-programming and management tools

AWARDS / RECOGNITIONS

- Oct 2014 Recipient of a Samsung GRO award on biometric signal processing for IoT devices.
- May 2013 Awarded as one of the young talents of the Venice region ("Premio Città Impresa," Vicenza, IT).
- Sept 2012 Selected as one of the top 10 young Italian researchers, among all disciplines, to present a highly innovative research project on telecommunications and control systems for microgrids @ ItaliaX10 (live streaming from the "Teatro Verdi" in Trieste, IT).
- 2008 Best tutorial paper award, "In-network aggregation techniques for wireless sensor networks: a survey," IEEE Wireless Communication Magazine.
- 2007 Best paper award, "Mobility aided routing in multi-hop heterogeneous networks with group mobility," IEEE GLOBECOM, Washington DC, US.
- 2006 Best paper award, "On the exploitation of user aggregation strategies in heterogeneous wireless networks," IEEE CAMAD, Trento, IT.
- 2005 Best paper award, "On the effectiveness of logical device aggregation in multi-radio multi-hop networks," IEEE MobiWac, Maui, Hawaii, US.

RECENT PUBLICATIONS

Five recent publications:

- [1] D. Del Testa, **Michele Rossi**, "Lightweight Lossy Compression of Biometric Patterns via Denoising Autoencoders," *IEEE Signal Processing Letters*, Vol. 22, No. 12, September 2015.
- [2] N. Bui, **Michele Rossi**, "Staying Alive: System Design for Self-Sufficient Sensor Networks," *ACM Transactions on Sensor Networks*, Vol. 11, No. 3, March 2015.
- [3] C. Tapparello, O. Simeone, **Michele Rossi**, "Dynamic Compression-Transmission for Energy-Harvesting Multihop Networks with Correlated Sources," *IEEE/ACM Transactions on Networking*, Vol. 22, No. 6, December 2014.
- [4] D. Zordan, B. Martinez, I. Villajosana, **Michele Rossi**, "On the Performance of Lossy Compression Schemes for Energy Constrained Sensor Networking," *ACM Transactions on Sensor Networks*, Vol. 11, No. 1, August 2014.
- [5] G. Quer, R. Masiero, G. Pillonetto, **Michele Rossi** and M. Zorzi, "Sensing, Compression and Recovery for WSNs: Sparse Signal Modeling and Modeling Framework," *IEEE Transactions on Wireless Communications*, Vol. 11, No. 10, October 2012.

OTHER

Personal interests Jazz guitar, swimming, skiing, science fiction