

Andrea Zanella - Qualifications

SHORT BIO

Andrea Zanella is Associate Professor at the Department of Information Engineering of the University of Padova, in Italy. He received the Laurea degree in Computer Engineering in 1998 (*summa cum laude*), and the Ph.D. in Electronic and Telecommunications Engineering in 2002, from the same University. From December 1, 2000 to September 1, 2001, he was engaged as post-doc researcher at the Department of Computer Science of the University of California, Los Angeles (UCLA), where he worked on Wireless Networks and Wireless Access to Internet in collaboration with Prof. Mario Gerla.

His major research interest is in the field of protocol design and performance evaluation of wireless systems. In particular, he has large expertise in the modeling and performance analysis of wireless local and personal area networks, cross-layer and cognitive protocols for multimedia transmissions over resource constrained networks, and localization algorithms for indoor wireless nodes. In the recent years, furthermore, he has started a new research trail addressed to the design of pure hydrodynamic microfluidic systems. In this context, he is leading an academic interdepartmental research project that is developing and experimenting some basic microfluidic devices to realize fundamental network functionalities. To date, he is (co)-author of 3 international patents and more than 100 papers appeared in international peer-reviewed journals and conference proceedings, with 3 best paper awards.

Andrea Zanella has long experience of participation in national and international collaborative research projects, included the FP7 projects SAPHYRE, MEDIEVAL, ARAGORN, NEWCOM. Furthermore, he has been involved in a number of collaborations with leading companies in the ICT field, as Alcatel Lucent Bell Labs, Telenor, Philips, ST-microelectronics.

Beside research, Andrea Zanella has also long teaching experience, matured by lecturing many bachelor and master classes in *Telecommunication Networks* and *Protocols for data transmissions and multimedia communications*. Furthermore, he is member of the PhD School in Information Engineering at the University of Padova, and he has supervised three PhD and tens of bachelor and master students.

Finally, he is *IEEE senior member*, and serves as Editor for the **IEEE Internet of Thing Journal** since January 2013, and of the **Digital Communications and Networks (DCN) journal**, edited by Elsevier, since January 2015. Furthermore, he serves as reviewer for several IEEE journals and international conferences in the ICT area. He is one of the coordinators of the SIGnals and NETworking (SIGNET) research lab, and he is board member for the PhD School on Information Engineering.

AWARDS

- **[Best student paper award]** F. Guidolin, I. Pappalardo, A. Zanella, M. Zorzi, *Context-Aware Handover in HetNets* in the Proceedings of the European Conference on Networks and Communications 2014, 23-26 Jun. 2014, Bologna, Italy. DOI: not yet available
- **[Best paper award]** E. Menegatti, M. Danieleto, M. Mina, A. Pretto, A. Bardella, S. Zanonato, P. Zanuttigh, and A. Zanella, "Autonomous discovery, localization and recognition of smart objects through WSN and image features," IEEE Globecom, SaCoNas Workshop, 6 Jul. 2010, Miami, USA.
- **[Best paper award]** D. Miorandi and A. Zanella, "Performance Analysis of Limited-1 Polling in a Bluetooth Piconet" the 9th Multi-Conference on Systemics, Cybernetics and Informatics and Co-located Conferences, 10-13 Jul. 2005, Orlando, Florida, USA.

- url: <http://scholar.google.it/citations?user=l3MzZV4AAAAJ&hl=en>
- Number of works: 132
- Citations: 1564
- Citations of the top 4 most cited papers: 220, 136, 130, 109
- h-index: 19
- i-10hindex: 33

Scopus

2014/06/24

- url: <http://www.scopus.com/authid/detail.url?authorId=7102861462>
- Number of works: 63
- Citations: 481
- Citations of the top 4 most cited papers: 98, 60, 53, 52
- h-index: 11

PATENTS

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- Inventors: A. Zanella, M. Zorzi, F. Maguolo, S. Merlin, N. Baldo, D. Siorpaes, D. Melpignano, I. Polato, R. Maguolo, S. Maguolo
 - Number: PCT/12/347,852, United States Patent Application 20100165856
 - Application Date: 2008-12-31
 - Publication Date: 2010-07-01
 - Patentee: STMicroelectronics S.p.A.
 - url: <https://www.google.com/patents/US20100165856>
- [2] *Link Adaptation In Wireless Networks* 2008
- Inventors: A. Zanella, M. Zorzi, F. Maguolo, S. Merlin, N. Baldo, D. Siorpaes, I. Polato, R. Maguolo, S. Maguolo
 - Number: PCT/12/347,874 (2008), United States Patent Application 20100169723
 - Application Date: 2008-12-31
 - Publication Date: 2010-07-01
 - Patentee: STMicroelectronics S.p.A.
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- [3] *Method for routing in a local mobile communication network* 2006
- Inventors: A. Zanella, M. Zorzi, F. Maguolo, E. Fasolo, S. Ruffino, P. Stupar
 - Number: PCT/EP2006/010465. United States Patent Application 20100061352
 - Application Date: 2006-10-31
 - Publication Date: 2010-03-11
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- [28] A. Zanella, E. Menegatti, *Simultaneous Localization of Robots and Mapping of Wireless Sensor Nodes* In: "Cooperative Robots and Sensor Networks 2014, Studies in Computational Intelligence" Volume 554, 2014, pp 3-23, Springer.
DOI: 10.1007/978-3-642-55029-4_1
Print ISBN: 978-3-642-55028-7 Online ISBN: 978-3-642-55029-4

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- [33] Andrea Biral, Davide Zordan, Andrea Zanella, *Transmitting information with microfluidic systems*, in the Proceedings of the IEEE International Conference on Communications (ICC 2015), June 8-12, 2015, London, UK. DOI: not yet available
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- [35] Fedrico Chiariotti, Pielli Chiara, Andrea Zanella, Michele Zorzi, *QoE-aware Video Rate Adaptation algorithms in multi-user IEEE 802.11 wireless networks*, in the Proceedings of the IEEE International Conference on Communications (ICC 2015), June 8-12, 2015, London, UK. DOI: not yet available
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- [54] **[Best paper award]** E. Menegatti, M. Danieleto, M. Mina, A. Pretto, A. Bardella, S. Zanconato, P. Zanuttigh, and A. Zanella, *Autonomous discovery, localization and recognition of smart objects through WSN and image features*, in the proceedings of the IEEE Globecom 2010 Workshop on Towards SmArt COmmunications and Network technologies applied on Autonomous Systems, 6 Dec. 2010, Miami, Florida, USA.
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