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EDUCATION AND PROFESSIONAL EXPERIENCE

- January 2019-today: Coordinator of the master in Telecommunications Engineering @ Politecnico di Milano
- January 2020-today: Rector's delegate for Horizon Europe
- November 2018-today: Full Professor at the Department of Electronics and Information of the Politecnico di Milano.
- 2015-2020 Vice-coordinator of the PhD programme in Information Technology @ Politecnico di Milano
- January 2015 –Nov. 2018: Associate Professor at the Department of Electronics and Information of the Politecnico di Milano.
- January 2005 –January 2015: Assistant Professor at the Department of Electronics and Information of the Politecnico di Milano.
- 3/2004–12/2004: Post Doc at the Electronics and Information Department of Politecnico di Milano.
- 3/2001-2/2004: PhD candidate in Information Engineering at the Department of Electronics and Information of the Politecnico di Milano. PhD Cum Laude with a thesis titled "Packet Switched Services in New Generation Wireless Systems: from UMTS to Ad Hoc Networks".
- 9/2002-4/2003: Employed by Computer Science Department of the University of California in Los Angeles (UCLA) as a visiting research scholar. Research topics: WLAN

analysis and QoS in Wireless Personal Area Networks (WPANs).

11/2000–2/2001: research associate at the Electronics and Information Department of Politecnico di Milano.

7/2000: Laurea (MS equivalent) in Telecommunications Engineering from Politecnico di Milano. Thesis title: “Study of packet switched data Services on UMTS radio interface”.

CURRENT TEACHING ACTIVITIES

Instructor of the course “**Fondamenti di Comunicazione e Internet**”, master degree in Computer Science and Engineering, Politecnico di Milano

Instructor of the course “**Internet of Things**”, 2010-today (5 credits, course in English). Master degree in Telecommunications and Computer Science and Engineering

RESEARCH INTERESTS

I’m co-founder of the Advanced Network Technologies Lab (ANT Lab) at the Dipartimento di Elettronica, Informazione e Bioingegneria, Politecnico di Milano (<http://antlab.deib.polimi.it>) where I coordinate the research activities in the field of the Internet of Things (IoT).

In the past, I’ve been extensively working on the design, optimization, and performance evaluation of wireless systems including:

1. Wireless ad hoc and vehicular networks
2. Broadband wireless access networks
3. Wireless Sensor Networks (WSN)
4. 3G cellular systems

BIBLIOMETRICS (Nov. 2020)

Scopus: H-Index: 29, citations number: 2761

Google Scholar: H-Index: 34, citations number: 4535

SERVICES TO THE RESEARCH COMMUNITY

Area Editor per Elsevier Ad Hoc networks Journal (2006-today)

Guest Editor for:

- -IEEE Network, special issue on "Networking Over Multi-Hop Cognitive Radio Networks" (7/2008-8/2009). M. Cesana, E. Ekici, Y. Bar-Ness, Networking Over Multi-Hop Cognitive Networks-Guest Editorial, IEEE Network, July 2009, vol. 23, no. 4, pp. 4-5
- -Wiley Journal on Security and Communication Networks, special Issue on "Security for QoS Assured Wireless and mobile Networks" (9/2010-3/2011). M. Cesana, A. Boukerche, A. Zomaya, Security for QoS assured wireless and mobile networks, Security and Communication Networks, vol. 4, no. 3, ISSN: 1939-0122, pp. 239-241
- Ad Hoc Networks Journal, special issue on "Models and Algorithms for Wireless Mesh Networks" (5/2010-2/2011), M. Cesana, X. Lin, N. B. Shroff, Q. Zhang, Special issue on models and algorithms for wireless mesh networks, Ad Hoc Networks, vol. 13, Part A, February 2014, pp. 107-109, ISSN 1570-8705
- Ad Hoc Networks, special issue on "Smart solutions for mobility supported distributed and embedded systems", A. Levi, Ö. Gürbüz, A. Maña, M. Klonowski, M. Cesana, M. Ghassemian, S. Sargento, "Smart solutions for mobility supported distributed and embedded systems", Ad Hoc Networks, vol. 15, April 2014, pp. 1-3, ISSN 1570-8705
- Springer Lecture Notes in Computer Science, volume on "Wireless Systems and New Trends in Network Architectures in Next Generation Internet", vol. 3883, Lecture Notes in Computer Science (6/2005-6/2006)
- International Journal of Distributed Sensor Networks (Hindawi), special issue on "Enabling Technologies and Smart Services for the Internet of Things", June 2015

Technical Program Chair

- 5th ACM Symposium on "QoS and Security for Wireless and Mobile Networks", Q2SWinet 2009, Tenerife, Spain, 26-30 Oct 2009.
- 6th ACM Symposium on "QoS and Security for Wireless and Mobile Networks", Q2SWinet 2010, Bodrum, Turkey, 16-23 Oct 2010.

- the 7th ACM Symposium on “QoS and Security for Wireless and Mobile Networks”, Q2SWinet 2011, Miami, USA, Oct-Nov 2011
- 2nd IEEE workshop on "CARrier Grade Wireless MESH Networks", CARMEN 2010, San Diego, California, USA, 15-19 March 2010 (in conjunction with IEEE INFOCOM 2010).
- the 5th IFIP conference on "New Technologies, Mobility and Security" (NTMS 2011), Istanbul, Turkey, 7-10 May 2012.
- 5th IFIP Conference on Wireless, WMNC 2016, Colmar, France, July 2016.

Other services

- **Publicity Co-Chair** of the first conference on "Sensor Systems and Software" (S-CUBE 2009), September 7-9, 2009 - Pisa, Italy
- **Student Research Competition (SRC) and Travel Grants Co-chair** for ACM Mobicom 2012, August 2012.
- **Tutorials co-Chair** per IEEE Globecom 2013
- **Electronic and Media Chair** for IEEE ICME 2015
- **TPC member** for several international conference and workshops

COMPETITIVE RESEARCH PROJECTS (since 2011)

-Latest National Projects

Project BASE5G – Broadband InterfAces and services for Smart Environments enabled by 5G technologies (2020-2022), regional project on 5G-enabled applications and services (POR FESR 2014-2020). Role: PI

Project MIE – Mobilità Intelligente Ecosostenibile, national technological cluster. Design of opportunistic routing techniques in mobile urban networks (grant number: CTN01-00034-594122). Role: researcher.

Project SHELL – Smart Living Technologies, national technological cluster. Design of communication technologies for energy management at home (grant number: CTN01 00128 111357). Role: researcher.

-Latest International Projects

Anticipatory Networking Techniques in 5G and Beyond, H2020 MSCA ITN-EID (2015-2019). International Training Network. Role: research unit co-coordinator

GreenEyes-Networked energy-aware visual analysis, FP7 FET-Open Young-Explorers (2012-2015). Design of visual sensor networks. Role: **project co-coordinator**.

TECHNOLOGY TRANSFER

Contribution to standards

□ S. TUBARO, M. TAGLIASACCHI, L. BAROFFIO, M. CESANA, A. REDONDI, "Coding local and global binary visual features extracted from video sequences", MPEG input document m35016, Strasbourg, October 2014

□ L. BAROFFIO, M. CESANA, A. REDONDI, M. TAGLIASACCHI, S. TUBARO, D. PAU, "Analyze-then-compress: a new visual encoder", MPEG input document, m29976, Vienna, July 2013

□ A. CANCLINI, M. CESANA, A. REDONDI, M. TAGLIASACCHI, J. ASCENSO, R. CILLA, D. PAU, "A comparative analysis of state-of-the-art visual feature detectors and descriptors", MPEG input document, m29303, Incheon, April 2013

Co-inventor of the following patents:

□ F. Borgonovo, A. Capone, M. Cesana, L. Fratta, Communication Protocol for Ad Hoc Networks, priority date 18/02/2003, Code EI.03.001.

□ R. Kapoor, M. Cesana, M. Gerla, QoS Multimedia Solution for the Bluetooth Stack, patent pending at the UCLA Intellectual Property Administration Office, UCLA Case no. 2003-315-1

□ S. Tubaro, M. Cesana, M. Tagliasacchi, L. Baroffio, A. Redondi, Metodo e sistema di analisi visual distribuita, priority date 24/12/2014, code: EIB.14.027.A

Co-founder of MobiMESH s.r.l., a spin-off company of Politecnico di Milano manufacturing networking devices and solutions for wireless mesh networks