

Curriculum Vitae

Paolo Bellavista



Full Professor of Distributed and Mobile Systems at
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SOME SUMMARIZED AND PRIMARY ELEMENTS OF MY CV

Source: **Google Scholar** (Feb 2020)

Citations=7467; h-index=38; i10-index=123

Source: **Scopus** (Feb 2020)

Citations= 3862; h-index=25

In total I am co-author of around **90 articles in international journals/magazines** (in publication venues that are considered excellent in my research fields, such as ACM Computing Surveys, IEEE Communication Surveys&Tutorials, IEEE Transactions on Software Engineering, IEEE Journal on Selected Areas in Communications, ACM Transactions on Internet Technology, IEEE Transactions on Vehicular Networks, Elsevier Pervasive and Mobile Computing Journal, Elsevier Journal of Network and Computer Applications, Elsevier Future Generation Computer Systems, IEEE Computer, IEEE Internet Computing, IEEE Pervasive Computing, IEEE Access, IEEE Communications, IEEE Wireless Communications). In addition, I have served as guest editor for around **15 special issues of international journals/magazines** (e.g., IEEE Communications, Elsevier Pervasive and Mobile Computing J., Elsevier J. Network and Computing Applications, and Springer Mobile Networks and Applications J.). Moreover, I am co-author of around 15 chapters in international peer-reviewed books and of around **130 additional papers** presented in **international conferences** organized by the primary professional associations and publishers (IEEE, ACM, Springer, ...).

About organization and reviewing activities, I am Editor-in-Chief of the MDPI Computers Journal (2017-) and I am (or have been) member of the Editorial Boards of several international journals/magazines, among which IEEE Communications Surveys&Tutorials (2019-), IEEE Transactions on Computers (2011-2015), IEEE Transactions on Network and Service Management (2011-), IEEE Transactions on Services Computing (2008-2017), IEEE Networking Letters (2019-), IEEE Communications Magazine (2003-2011), Elsevier Pervasive and Mobile Computing Journal (2010-), Elsevier Journal on Network and Computing Applications (2015-), Elsevier Journal of Systems Architecture (2003-), Springer Journal of Network and Systems Management (2008-), MDPI Sensors Journal, and SAGE International Journal of Distributed Sensor Networks. About most recent conference organization activities, I have served or am serving as Technical Program Co-Chair of IEEE Mobile Cloud 2015, General Co-Chair of Smart Cloud Networks & Systems (SCNS) 2018, Technical Program Co-Chair of ACM Int. Conf. Distributed Computing and Networking (ICDCN'17), General Co-Chair of ACM ICDCN'18, Workshop Co-Chair of MobiArch'17 (within ACM SIGCOMM), and Technical Program Co-Chair of Int. Conf. on Telecommunications (ICT'17).

Finally, among the roles I am covering and covered to serve my community, I can list the fact that I was member of the Academic Senate of Alma Mater Studiorum – Università di Bologna (2015-2018), I am member of the Gruppo Tematico di Ateneo (GTA) on ICT (2017-), I am the UNIBO representative and member of the Giunta of the national Group of Computer Engineering (Gruppo Ingegneria Informatica – GII, 2018-), and I am Senior Member of both IEEE (2006-) and ACM (2009-), I am elected Vice-Chair of the IEEE ComSoc Internet Technical Committee (started Dec. 2019), I am member of the Steering Committee of the European Technology Platform called Networked European Software and Service Initiative (NESSI, 2009-), and I am the UNIBO representative in the EIT Digital KIC National Steering Committee (2017-).

QUALIFICATIONS AND SENIOR MEMBERSHIPS

- I was an **Invited Professor at Université Pierre et Marie Curie (UPMC) – Sorbonne Université** (formerly Paris 6), Paris, France, for three months (from June 10 to September 10, 2017). UPMC is ranked the top university in France and 6th in Europe by both Shanghai and Taiwan rankings. The “Professeur Invité” status is prestigious, and the associated appointment process is highly selective, being the status given to only 3 people per year for the whole School of Engineering
- **Invited Professor at University College London (UCL)**, UK, for one month (from July 15 to August 15, 2019)
- **IEEE Senior Member** since 2006 and **ACM Senior Member** since 2009
- Elected **Secretary of the IEEE ComSoc Internet Technical Committee** (Dec. 2017-Nov. 2019)
- I am the UNIBO representative and one of the members of the Giunta of the national Group of Computer Engineering (Gruppo Ingegneria Informatica – GII), starting from Jan. 2018

SCIENTIFIC ACTIVITIES - PRIMARY RESEARCH TOPICS

- Architectures and systems to support mobile, context-aware, and pervasive applications
- Middleware for dynamic and adaptive mobile services in pervasive computing scenarios and integrated wired-wireless IoT systems in general. Application domains:
 - Integrated management of networks, systems, and services
 - Federation of cloud infrastructures and resources, with special focus on Quality of Service and dynamic resource migration
 - Efficient and scalable integration, with exploitation of dynamically determined localities, of sensors/actuators and cloud computing for Cyber Physical Systems, with special focus on edge/fog computing techniques
 - Online stream processing of big data for cloud-Internet of Things environments
 - Wireless sensor networks and smart space services, with special focus on smart buildings and high scalability in wide-scale urban environments
 - Opportunistic and completely decentralized urban monitoring via vehicular ad-hoc sensor networking
 - Resource replication and dissemination in mobile ad-hoc and dense networks
 - Framework extensions and services for scalability in IP Multimedia Subsystem (IMS) and, more in general, for cloud-based virtual network functions in 4G/5G ecosystems
 - Provisioning of continuous and context-aware services with guarantees/indications of Quality of Service towards mobile users and devices, e.g., by considering predictive and proactive management of horizontal/vertical handovers
 - Opportunistic and cooperative sharing of resources in highly decentralized and heterogeneous environments (integration/federation of heterogeneous subnetworks, simultaneous exploitation of different network interfaces, sharing incentives, ...)

RECENT PARTICIPATION IN COMPETITIVE RESEARCH PROJECTS

- EU H2020 ICT-11 Innovation Action, “IoTwins”, Coordinator Bonfiglioli Riduttori, Scientific Coordinator Paolo Bellavista (2019-2022), overall budget 20.6M€; overall scientific coordinator
- EU H2020 NMP Research & Innovation Action, “SimDome”, Coordinator UNIBO (2019-2022), overall budget 4.6M€; leading UNIBO activities on ontologies for material modeling
- EU H2020-NMBP-TO-IND-2018-2020 Research & Innovation Action, “OntoTrans”, Coordinator TU Wien Austria (2020-2023), overall budget 5.5M€, leading UNIBO activities on ontology platforms and interoperability solutions
- EU H2020 H2020-DT-2018-2020 Innovation Action, “Change2Twin”, Coordinator SINTEF Norway (2020-2023), overall budget 8.0M€, UNIBO leader
- EU FP7 Large-scale IP, FP7 Future Networks Call, “Mobile Cloud Networking (MCN)”, Coordinator SAP Germany (2012-2016), overall budget 15.7M€; UNIBO leader

- Artemis Joint Undertaking, Innovation Pilot Project, “Arrowhead Tools”, Coordinator Lulea U. Technology Sweden (2019-2022), overall budget 21M€; task leader.
- EU FP7 STREP, ICT Call 8 (FP7-ICT-2011-8), “Cooperative Self-Organizing System for low Carbon Mobility at low Penetration Rates (COLOMBO)”, Coordinator DLR Germany (2012-2015), overall budget 2.4M€; task leader

The above research topics are covered also via the coordination and supervision work of a research group, namely Mobile Middleware Research Group – <http://middleware.unibo.it>. This group, which is coordinated by Antonio Corradi and me, consists of around 10-15 people, including the colleagues Professors Luca Foschini, Rebecca Montanari, Mirco Musolesi, Ph.D. students, PostDoc collaborators and research grant staff, who actively contribute to our research activities and projects.

Please see the full list of publications at:

<https://www.unibo.it/sitoweb/paolo.bellavista>

<https://dblp.uni-trier.de/pers/hd/b/Bellavista:Paolo>

Bologna, 28/02/2020