

Short Curriculum Vitae

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QUALIFICATIONS

- From August to September 2002, I was **visiting scholar at University of Illinois at Urbana-Champagin (UIUC)**, Illinois, USA, where I developed part of my thesis under the supervision of Prof. Klara Nahrstedt
- In July 2003, I received my **Laurea with honors in Computer Engineering** from the University of Bologna, Italy, discussing the thesis "Multimedia Streaming Management Over Heterogeneous Wired/Wireless Networks"
- In December 2003, I received my **"Abilitazione alla Professione" (Italian Professional Certificate) in Computer Engineering**
- In April 2007, I received my **Ph.D. in Computer Engineering** at the Dipartimento di Elettronica, Informatica e Sistemistica (DEIS) of the University of Bologna, discussing the doctoral dissertation "Support Infrastructures for Multimedia Services with Guaranteed Continuity and QoS"

SCIENTIFIC ACTIVITIES

RESEARCH TOPICS

- Dynamic and Adaptive Distributed Services in Mobile Computing Environments:
 - Integrated management of networks, systems, and services
 - Distribution of continuous media flows with guarantees/indications of Quality of Service
 - Mobile-enabled middleware mechanisms for handoff management of continuous service in heterogeneous wireless networks
 - Context data modeling and context-based infrastructures for handoff management
 - Mobile code technologies for ubiquitous service provisioning
- Session Management and Standardization Technologies for Next Generation Networks

RECENT PARTICIPATION IN RESEARCH PROJECTS

- **MIUR** Negotiated Project **FIRB**, Strategic Program Enabling Technologies for the Information Society - Objective 2: Networks and Net-computing, "**WEB-MINDS: Middleware for Advanced Services over Large-Scale Wired-Wireless Systems**", Coordinator Prof. Giovanni Chiola (2003-2005)
- **CNR** Strategic Project, Funding Area: Enabling Software Platforms for Complex Distributed Objects, "**IS-MANET: Middleware for Mobile Ad Hoc Networks and their Applications**", Coordinator Prof. Carlo Ghezzi (2003-2005)
- **MURST PRIN** Project "**MOMA: a middleware approach to MOBILE Multimodal web services**", Coordinator Prof. Marco Rocchetti (2006-2007)
- **MIUR** Negotiated Project **FIRB**, Strategic Program Enabling Technologies for the Information Society – Objective 2: Networks and Net-computing, "**TOCAI: Knowledge-oriented**

Technologies for Internet-based Enterprise Aggregation", Coordinator Prof. Maurizio Lenzerini (2006-2008)

- **Artemis** Joint Undertaking, Sub-Programme 3, "**Smart Objects For Intelligent Applications (SOFIA)**", Coordinator Dr. Petri Liuha, Nokia Research Finland (2009-2011)

RECENT REVIEWING AND ORGANIZATION ACTIVITIES

- **Member of the Editorial Review Board** for the international journals:
 - **IGI International Journal of Handheld Computing Research (IJHCR)** since 2009
 - **IGI International Journal of Adaptive, Resilient, and Autonomic Systems (IJARAS)** since 2009
- **Reviewer** for the international journals/magazines:
 - **IEEE Communications Magazine** since 2006
 - **IEEE Wireless Communications Magazine** since 2007
 - **Elsevier Journal of Parallel and Distributed Computing** since 2006
 - **Elsevier Journal on Computers and Electrical Engineering** since 2006
 - **Elsevier Computer Communications Journal** since 2008
 - **Springer Journal of Network and Systems Management** since 2007
 - **ACM/Springer Journal on Mobile Networks and Applications** since 2008
 - **Wiley Wireless Communications and Mobile Computing** since 2008
- **Member of the Steering Committee** of the **International Workshop on Adaptive and Dependable Mobile Ubiquitous Systems (ADAMUS)** since 2008, and **Technical Program Co-Chair of ADAMUS'09**
- **Member of the Technical Program Committee** of the international conferences/workshops:
 - **ADAMUS**, Workshop on Adaptive and Dependable Mobile Ubiquitous Systems (ADAMUS) within ACM International Conference on Pervasive Services – ICPS, formerly within IEEE International Symposium on World of Wireless Mobile and Multimedia Networks – WoWMoM (since 2007)
 - **MobileLearning**, IADIS International Conference on Mobile Learning (since 2008)
 - **PIMRC'08**, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications
 - **Kaleidoscope'09**, ITU/IEEE International Conference
 - **WCNC**, IEEE International Conference on Wireless Communications and Networking, Services Track (since 2009)
 - **MediaWIN'09**, Workshop on multiMedia Applications over Wireless Networks, within IEEE Symposium on Computers and Communications
 - **TNS**, IADIS International Conference on Telecommunications, Networks and Systems (since 2009)
 - **WMuNeP'09**, ACM International Workshop on Wireless Multimedia Networking and Performance Modeling
 - **PerCOL'10**, Workshop on Communication, Collaboration and Social Networking in Pervasive Computing Environments within the IEEE International Conference on Pervasive Computing and Communications – PerCom
 - **WoWMoM'10**, IEEE International Symposium on World of Wireless Mobile and Multimedia Networks
- **Guest editor** for the **Special Issue of IGI International Journal of Adaptive, Resilient, and Autonomic Systems (IJARAS) on Adaptive and Dependable Mobile Ubiquitous Systems (ADAMUS) Workshop**, Vol.1, No. 2, Apr. 2010
- **Panelist** for the international conferences/workshops:
 - **ICPS'09**, ACM International Conference on Pervasive Services

- **Keynote speaker** for the international conferences/workshops:
 - **P2MNet'09**, IEEE International Workshop on Performance and Management of Wireless and Mobile Networks within the IEEE Conference on Local Computer Networks (LCN)
- **Local Arrangement Co-Chair** of the IEEE Symposium on Computers and Communications 2010 (**ISCC'10**), Rimini, Italy, Jun. 22-25, 2010
- **Publicity Chair** of the Int. Workshop on multiMedia Applications over Wireless Networks (**MediaWiN**), within IEEE Symposium on Computers and Communications (since 2009)
- **Reviewer** for the international conferences/workshops:
 - **PWC'04**, International Conference on Personal Wireless Communications
 - **PerCom**, IEEE International Conference on Pervasive Computing and Communications, IEEE Computer Society Press (for the years **2004** and **2006**)
 - **IWUC'05**, International Workshop on Ubiquitous Computing, within International Conference on Enterprise Information Systems (ICEIS)
 - **ISCC**, IEEE International Symposium on Computers and Communications, IEEE Computer Society Press (**since 2005**)
 - **HotP2P**, IEEE International Workshop on Hot Topics in Peer-to-Peer Systems, within IEEE International Parallel & Distributed Processing Symposium – IPDPS, IEEE Computer Society Press (**since 2005**)
 - **WoWMoM**, IEEE International Symposium on World of Wireless Mobile and Multimedia Networks, IEEE Computer Society Press (for the years **2005**, **2008**, **2009**, **2010**)
 - **Globecom**, IEEE Global Telecommunications Conference, IEEE Computer Society Press (for the years **2006** and **2010**)
 - **MediaWiN**, Workshop on multiMedia Applications over Wireless Networks, IEEE Computer Society Press (**since 2006**)
 - **ICC**, sessions supported by Communications Quality & Reliability (CQR) Technical Committee, IEEE International Conference on Communications, IEEE Computer Society Press (**since 2007**)
 - **GIIS'07**, IEEE International Global Information Infrastructure Symposium, IEEE Computer Society Press
 - **SASO'07**, First IEEE International Conference on Self-Adaptive and Self-Organizing Systems, IEEE Computer Society Press
 - **COMPSAC**, IEEE International Computer Software and Applications Conference, IEEE Computer Society Press (**since 2007**)
 - **ICCCN'07**, 16th IEEE International Conference on Computer Communications and Networks, IEEE Computer Society Press
 - **UIC'07**, IEEE International Conference on Ubiquitous Intelligence and Computing, Springer Verlag Lecture Notes in Computer Science
 - **ICME**, IEEE International Conference on Multimedia & Expo, IEEE Computer Society Press (**since 2008**)
 - **Mobilware**, International Conference on Mobile Wireless Middleware, Operating Systems, and Applications, Springer Lecture Notes of ICST series (**since 2008**)
 - **INGN'08**, co-sponsored ITU-T and IEEE International Conference on Innovations in Next Generation Networks, IEEE Computer Society Press
 - **ISWPC'08**, IEEE International Symposium on Wireless Pervasive Computing, IEEE Computer Society Press
 - **MobileLearning**, IADIS International Conference on Mobile Learning, (**since 2008**)
 - **HiPC'08**, IEEE International Conference on High Performance Computing
 - **WCNC**, IEEE International Conference on Wireless Communications and Networking, Services Track (**since 2009**)
 - **ANSS'09**, SCS/ACM-SIGSIM International Annual Simulation Symposium
 - **LCN'09**, IEEE International Conference on Local Computer Networks

- **MMNS'09**, IFIP/IEEE International Conference on Management of Multimedia and Mobile Networks and Services 2009
- **MobiMedia'09**, ACM International Mobile Multimedia Communications Conference 2009
- **PE-WASUN**, ACM International Symposium on Performance Evaluation of Wireless Ad Hoc, Sensor, and Ubiquitous Networks (**since 2009**)
- **Session chair** for the international conferences/workshops:
 - **ISCC'04**, IEEE International Symposium on Computers and Communications, Alessandria, Egitto, Jun. 2004;
 - **SIUMI'06**, IEEE International Workshop on Services and Infrastructure for the Ubiquitous and Mobile Internet (SIUMI'06), within 26th International Conference on Distributed Computer Systems (ICDCS'06), Lisbona, Portogallo, Jul. 2006;
 - **MUE'07**, International Conference on Multimedia and Ubiquitous Engineering, Seoul, Corea, Apr. 2007;
 - **ISCC'08**, IEEE International Symposium on Computers and Communications, Marrakesh, Marocco, Jul. 2008;
 - **MediaWiN'09**, IEEE International Workshop on multiMedia Applications over Wireless Networks, Sousse, Tunisia, Jul. 2009.

PUBLICATIONS (in publication order)

International Journal and Magazines

- P. Bellavista, A. Corradi, L. Foschini, "**The MUM Middleware to Counteract IEEE 802.11 Performance Anomaly in Context-aware Multimedia Provisioning**", in the **International Journal of Multimedia and Ubiquitous Engineering**, SERSC Publisher, Vol. 2, No. 2, pages 15-32, Jul. 2007.
- P. Bellavista, A. Corradi, L. Foschini, "**Context-Aware Handoff Middleware for Transparent Service Continuity in Wireless Networks**", in the **Pervasive and Mobile Computing Journal**, Elsevier Science, Vol. 3, No. 4, pages 439-466, Aug. 2007.
- P. Bellavista, A. Corradi, L. Foschini, "**Dynamic and Context-aware Streaming Adaptation to Smooth Quality Degradation due to IEEE 802.11 Performance Anomaly**", in the **Springer Journal of Supercomputing**, Special Issue on Multimedia and Ubiquitous Engineering, Springer-Verlag, Vol. 45, No. 1, Jul. 2008, IF=0.615.
- P. Bellavista, A. Corradi, L. Foschini, "**IMS-based Presence Service with Enhanced Scalability and Guaranteed QoS for Inter-Domain Enterprise Mobility**", in **IEEE Wireless Communications Magazine**, SI on Enterprise Mobility Services, IEEE Communications Society, Vol. 16, No.3, pages 16-23, Jun. 2009, IF=3.180.
- P. Bellavista, M. Cinque, D. Cotroneo, L. Foschini, "**Self-Adaptive Handoff Management for Mobile Streaming Continuity**", accepted for publication in **IEEE Transactions on Network and Service Management**, IEEE Press, Feb. 2010.
- A. Corradi, M. Fanelli, L. Foschini, "**Towards Adaptive and Scalable Context-Aware Middleware**", invited paper to be published in the first issue of the **IGI International Journal of Adaptive, Resilient and Autonomic Systems (IJARAS)**, IGI Global, Vol. 1, No. 1, pages 58-74, Jan.-Mar. 2010.
- P. Bellavista, A. Corradi, L. Foschini, "**IMS-compliant Management of Vertical Handoffs for Mobile Multimedia Session Continuity**", accepted for publication in **IEEE Communications Magazine**, IEEE Communications Society, Jun. 2010, IF=2.799.

Chapters in International Books

- P. Bellavista, A. Corradi, L. Foschini, "**Middleware for Handoff Management in Wireless Internet Mobile Multimedia**", Chapter (from open call) in the book "**Broadband Mobile Multimedia: Techniques and Applications**", Yan Zhang, Shiwen Mao, Laurence T. Yang, Thomas Chen (eds), Taylor&Francis, Spring 2008.
- P. Bellavista, A. Corradi, L. Foschini, "**Presence Services for the Support of Location-based Applications**", Chapter in the book "**Location Based Services Handbook: Applications**,

Technologies, and Security", Syed Ahson and Mohammad Ilyas (eds), CRC Press Taylor&Francis group, to be published in the first half of 2010.

International Conferences

- P. Bellavista, A. Corradi, L. Foschini, "**MUM: a Middleware for the Provisioning of Continuous Services to Mobile Users**", in the Proceedings of the **9th IEEE International Symposium on Computers and Communications (ISCC'04)**, pp. 498-505, Alexandria, Egypt, Jun. 29-31, 2004, IEEE Computer Society Press.
- P. Bellavista, A. Corradi, L. Foschini, "**MUMOC: an Active Infrastructure for Open Video Caching**", in the Proceedings of the **1st International Conference on Distributed Frameworks for Multimedia Applications (DFMA'05)**, pp. 64-71, Besançon, France, Feb. 6-9, 2005, IEEE Computer Society Press.
- P. Bellavista, A. Corradi, L. Foschini, "**Java-based Proactive Buffering for Multimedia Streaming Continuity in the Wireless Internet**", Poster paper in the Proceedings of the **1st IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM'05)**, pp. 448-450, Taormina, Italy, Jun. 13-16, 2005, IEEE Computer Society Press.
- P. Bellavista, A. Corradi, L. Foschini, "**Application-level Middleware to Proactively Manage Handoff in Wireless Internet Multimedia**", in the Proceedings of the **8th International Conference on Management of Multimedia Networks and Services (MMNS'05)**, pp. 156-167, Barcelona, Spain, Oct. 24-26, 2005, IEEE Computer Society Press.
- P. Bellavista, A. Corradi, L. Foschini, "**Proactive Management of Distributed Buffers for Streaming Continuity in Wired-Wireless Integrated Networks**", in the Proceedings of the **10th IEEE/IFIP Network Operations and Management Symposium (NOMS'06)**, pp. 351-360, Vancouver, Canada, Apr. 3-7, 2006, IEEE Computer Society Press.
- P. Bellavista, A. Corradi, L. Foschini, "**Context-Aware Multimedia Middleware Solutions for Counteracting IEEE 802.11 Performance Anomaly**", Invited Paper in the Proceedings of the **International Conference on Multimedia and Ubiquitous Engineering (MUE'07)**, pp. 9-16, Seoul, Korea, Apr. 26-28, 2007, IEEE Computer Society Press.
- P. Bellavista, A. Corradi, L. Foschini, "**An IMS Vertical Handoff Solution to Dynamically Adapt Mobile Multimedia Services**", in the Proceedings of the **13th IEEE International Symposium on Computers and Communications (ISCC'08)**, pages 764-771, Marrakesh, Morocco, July 6-9, 2008, IEEE Computer Society Press.
- P. Bellavista, A. Corradi, L. Foschini, "**An IMS-based Middleware Solution for Energy-Efficient and Cost-Effective Mobile Multimedia Services**", to appear in Proceedings of the **2nd International ICST Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications (MOBILWARE'09)**, pages 280-294, Berlin, Germany, April 28-29, 2009, Springer Lecture Notes of ICST series.
- A. Corradi, M. Fanelli, L. Foschini, "**Implementing a Scalable Context-Aware Middleware**", to appear in the Proceedings of the **14th IEEE International Symposium on Computers and Communications (ISCC'09)**, Sousse, Tunisia, July 5-8, 2009, IEEE Computer Society Press.
- P. Bellavista, A. Corradi, L. Foschini, "**Enhancing the Scalability of IMS-based Presence Service for LBS Applications**", in the Proceedings of the **33rd IEEE International Computer Software and Applications Conference (COMPSAC'09)**, Vol. 1, pages 29-36, Seattle, Washington, USA, July 20-24, 2009, IEEE Computer Society Press.
- A. Corradi, M. Fanelli, L. Foschini, "**Adaptive Context Data Distribution with Guaranteed Quality for Mobile Environments**", in the Proceedings of the **5th IEEE International Symposium on Wireless Pervasive Computing (ISWPC'10)**, pages 1-8, Modena, Italy, May 5-7, 2010, IEEE Computer Society Press.
- A. Corradi, G. Cardone, L. Foschini, "**Translucent Middleware Approach to Facilitate WSN Access Management**", to appear as short paper in the Proceedings of the **15th IEEE International Symposium on Computers and Communications (ISCC'10)**, Riccione, Italy, June 23-25, 2010, IEEE Computer Society Press.
- A. Corradi, L. Nardelli, L. Foschini, "**A DDS-Compliant Infrastructure for Fault-Tolerant and Scalable Data Dissemination**", to appear in the Proceedings of the **15th IEEE International**

Symposium on Computers and Communications (ISCC'10), Riccione, Italy, June 23-25, 2010, IEEE Computer Society Press.

International Workshops

- P. Bellavista, M. Cinque, D. Cotroneo, L. Foschini, "**Integrated Support for Handoff Management and Context Awareness in Heterogeneous Wireless Networks**", in the Proceedings of the **3rd International Workshop on Middleware for Pervasive Ad-Hoc Computing (MPAC'05)**, held in conjunction with the **6th International Middleware Conference**, pp. 113-120, ACM Press, Grenoble, France, Nov. 28-Dec. 2, 2005.
- P. Bellavista, A. Corradi, L. Foschini, "**SIP-Based Proactive Handoff Management for Session Continuity in the Wireless Internet**", in the Proceedings of the **2nd IEEE International Workshop on Services and Infrastructure for the Ubiquitous and Mobile Internet (SIUMI'06)**, held in conjunction with the **26th International Conference on Distributed Computer Systems (ICDCS'06)**, pp. 69-76, IEEE Computer Society Press, Lisboa, Portugal, Jul. 4-7, 2006.
- A. Corradi, L. Foschini, "**A DDS-Compliant P2P Infrastructure for Reliable and QoS-Enabled Data Dissemination**", to appear in Proceedings of the **6th International Workshop on Hot Topics in Peer-to-Peer Systems (HOTP2P'09)**, held in conjunction with the **23rd IEEE International Parallel & Distributed Processing Symposium (IPDPS'09)**, IEEE Computer Society Press, Rome, Italy, May 29, 2009.
- P. Bellavista, A. Corradi, L. Foschini, "**Effective Adaptation Decisions based on Context-aware Proactive Handoff for Mobile Multimedia Continuity Maintenance**", to appear in the Proceedings of the **4th IEEE International Workshop on multiMedia Applications over Wireless Networks (MediaWiN'09)**, held in conjunction with the **14th IEEE International Symposium on Computers and Communications (ISCC'09)**, IEEE Computer Society Press, pages 48-53, Sousse, Tunisia, July 5-8, 2009.
- P. Bellavista, A. Corradi, L. Foschini, "**Understanding and Enhancing the Scalability of IMS-based Services for Wireless Local Networks**", Invited Paper in Proceedings of **9th International Workshop on Wireless Local Networks (WLN'09)**, within **34th IEEE Conference on Local Computer Networks (LCN'09)**, IEEE Computer Society Press, pages 1033-1039, Zurich, Switzerland, Oct. 2009.

RECENT TEACHING ACTIVITIES

- Since the 2009/2010 academic year, I am **professor** (together with Michela Milano) of **Computer Basics T-AB** (9 cfu) for the Laurea in Ingegneria Elettronica e Telecomunicazioni e Ingegneria dell'Automazione of the University of Bologna.
- **Teaching Assistant** for the Laurea in Ingegneria Informatica, University of Bologna, for the following courses:
 - Since the academic year 2004-2005, I am teaching assistant of **Computer Networks L-A** (6 cfu) held by Prof. A. Corradi.
 - Since the academic year 2005-2006, I am teaching assistant of **Computer Networks L-S** (6 cfu) held by Prof. A. Corradi.
 - Since the academic year 2009-2010, I am teaching assistant of **Computer Networks M** (6 cfu) held by Prof. A. Corradi.
- For the academic years 2006-2007 and 2007-2008, I was **teaching assistant** of Master CESPEM for creation and development of innovative SME in transition countries, for the course **Introduction Computer Science** held by Prof. M. Boari.