

Amy L. Murphy

Curriculum vitae

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PERSONAL DATA

Date of Birth: 6 August 1973
Place of Birth: Rochester, Minnesota, USA
Citizenship: USA, Italy
Current Residence: Levico Terme, Italy
Languages: English (native), Italian (intermediate)

EDUCATION

Degree granted: D.Sc. in Computer Science.
August 2000 Washington University, St. Louis, MO
Dissertation: *Toward the Rapid and Dependable Development
Applications in the Mobile Environment*
Advisor: Dr. Gruia-Catalin Roman

Degree granted: M.S. in Computer Science.
May 1997 Washington University, St. Louis, MO.

Degree granted: B.S. in Computer Science.
May 1995 University of Tulsa, OK. magna cum laude.
Senior thesis: *A Formally Specified Negotiation Strategy
for the Feature Interaction Problem*
Advisor: Dr. R.F. Gamble

EMPLOYMENT HISTORY

Sept. 2006 -present Senior Researcher (R2)
Embedded Systems Unit (ES)
Center for Information and Communication Technology (ICT)
Fondazione Bruno Kessler, Trento, Italy
(Bruno Kessler Foundation)
(Formerly Institute for Trentino Culture - ITC)

Sept. 2004 -2006 Assistant Professor
Faculty of Informatics
Università della Svizzera italiana
(University of Lugano, Switzerland)

June 2003-04 Visiting Researcher
Dipartimento di Elettronica e Informazione
Politecnico di Milano, Italy
Host: Carlo Ghezzi

Aug. 2000-May 04 Assistant Professor

Department of Computer Science
University of Rochester, NY, USA

1995-2000

Research Assistant
Department of Computer Science
Washington University in St. Louis, Missouri, USA

PUBLICATIONS

1. U. Raza, A. Bogliolo, V. Freschi, E. Lattanzi, A.L. Murphy. A two-prong approach to energy-efficient WSNs: Wake-up receivers plus dedicated, model-based sensing. *Elsevier Journal on Ad Hoc Networks*. 2016. In press.
2. G.P. Picco, D. Molteni, A.L. Murphy, F. Ossi, F. Cagnacci, M. Corra, S. Nicoloso. Georeferenced Proximity Detection of Wildlife with WildScope: Design and Characterization, In *Proceedings of the 14th International Conference on Information Processing in Sensor Networks (IPSN)*, Seattle, WA, USA, April 2015, Best Paper Award.
3. U. Raza, A. Camera, A.L. Murphy, T. Palpanas, G.P. Picco. Practical Data Prediction for Real-World Wireless Sensor Networks, In *IEEE Trans. on Knowledge and Data Engineering (TKDE)*, 2015.
4. T. Istomin, R. Marfievici, A.L. Murphy, G.P. Picco. TRIDENT: In-field Connectivity Assessment for Wireless Sensor Networks, In *Proceedings of the 6th Extreme Conference on Communication and Computing (ExtremeCom)*, Galapagos Islands, Ecuador, August 2014.
5. A. Bogliolo, V. Freschi, E. Lattanzi, A.L. Murphy, U. Raza. "Towards a True Energetically Sustainable WSN: A Case Study with Prediction-Based Data Collection and a Wake-up Receiver", In *Proceedings of the 9th IEEE International Symposium on Industrial Embedded Systems (SIES)*, Pisa, Italy, June 2014.
6. U. Raza, A.L. Murphy, G.P. Picco. "Poster Abstract: Pushing a Standard Wireless Sensor Network Stack for Ultra-low Data Rates", In *Proceedings of the 11th ACM Conference on Embedded Network Sensor Systems (SENSYS)*, Rome, Italy, November 2013.
7. R. Marfievici, A.L. Murphy, G.P. Picco, F. Ossi, F. Cagnacci. "Poster Abstract: Are Those Trees Messing with My Wireless Sensor Network?", In *Proceedings of the 11th ACM Conference on Embedded Network Sensor Systems (SENSYS)*, Rome, Italy, November 2013.
8. R. Marfievici, A.L. Murphy, G.P. Picco, F. Ossi, F. Cagnacci. "How Environmental Factors Impact Outdoor Sensor Networks: A Case Study", In *Proceedings of the IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS)*, Hangzhou, China, October 2013.
9. U. Raza, A.L. Murphy, G.P. Picco. Embracing Localization Inaccuracy: A Case Study, In *Proceedings of the IEEE International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP)*, Melbourne, Australia, April 2013.
10. U. Raza, A. Camera, A.L. Murphy, T. Palpanas, G.P. Picco. What Does Model-Driven Data Acquisition Really Achieve in Wireless Sensor Networks? In *Proceedings of the IEEE International Conference on Pervasive Computing and Communications (PerCom)*, Lugano, Switzerland, March 2012. Mark Weiser Best Paper Award.
11. A. Förster and A.L. Murphy. Froms: A Failure Tolerant and Mobility Enabled Multicast Routing Paradigm with Reinforcement Learning for WSNs In *Elsevier Ad Hoc Networks*, vol. 9, no. 5, pp 940-965, July 2011
12. M. Chini, M. Ceriotti, R. Marfievici, A.L. Murphy, G.P. Picco. TRIDENT: Untethered Observation of Physical Communication Made to Share Demonstration. In *Proceedings of the 9th ACM International Conference on Embedded Networked Sensor Systems (SENSYS)*, Seattle, Washington USA, November 2011.

13. M. Ceriotti, M. Corr, L. D’Orazio, R. Doriguzzi, D. Facchin, S. Guna, G.P. Jesi, R. Lo Cigno, L. Mottola, A.L. Murphy, M. Pescalli, G.P. Picco, D. Pregolato, C. Torghelle. Is There Light at the Ends of the Tunnel? Wireless Sensor Networks for Adaptive Lighting in Road Tunnels In *Proceedings of the 10th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN 2011, SPOTS track)*, Chicago (IL, USA), April 12-14, 2011, pp. 187-198. Best Paper Award.
14. M. Ceriotti, M. Chini, A.L. Murphy, G.P. Picco, F. Cagnacci, and B. Tolhurst. Motes in the Jungle: Lessons Learned from a Short-term WSN Deployment in the Ecuador Cloud Forest, In *Proceedings of the 4th Workshop on Real-World Wireless Sensor Networks (RealWSN)*, Colombo (Sri Lanka), December 2010.
15. L. Mottola, G.P. Picco, M. Ceriotti, S. Guna, and A.L. Murphy. Not All Wireless Sensor Networks Are Created Equal: A Comparative Study On Tunnels In *ACM Transactions on Sensor Networks (TOSN)*, vol 2, no. 2, article 15, August 2010. Data sets
16. M. Ceriotti, and A.L. Murphy A MAC Contest between LPL (the Champion) and Reins-MAC (the Challenger, an Anarchic TDMA Scheduler Providing QoS), Demonstration. In *Proceedings of the 8th ACM International Conference on Embedded Networked Sensor Systems (SENSYS)*, Zurich, Switzerland, November 2010.
17. D. Zonta, H. Wu, M. Pozzi, P. Zanon, M. Ceriotti, L. Mottola, G.P. Picco, A.L. Murphy, . Gun, M. Corra’. Wireless Sensor Networks for Permanent Health Monitoring of Historic Constructions. In *SPIE International Journal on Smart Structures and Systems*. Special Issue on Wireless Sensor Advances and Applications for Civil Infrastructure Monitoring. Volume 6, Issue 5-6. June 2010.
18. A. Förster, A. Förster and A.L. Murphy. Optimal cluster sizes for wireless sensor networks: An experimental analysis, In *Proceedings of the 1st International Conference on Ad Hoc Networks (AdHocNets)*, Niagara Falls, Canada, September 2009.
19. A. Förster and A.L. Murphy. CLIQUE: Role-Free Clustering with Q-Learning for WSNs, In *Proceedings of the 29th International Conference on Distributed Computing Systems (ICDCS)*, Montreal, Canada, June 2009.
20. M. Ceriotti, L. Mottola, G.P. Picco, A.L. Murphy, S. Guna, M. Corra’, M. Pozzi, D. Zonta, and P. Zanon. Monitoring Heritage Buildings with Wireless Sensor Networks: The Torre Aquila Deployment. In *Proceedings of the 8th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN 2009, SPOTS track)*, San Francisco (CA, USA), April 13-16, 2009. Best Paper Award.
21. L.L. Fernandes, and A.L. Murphy. MVSink: Incrementally Building In-Network Aggregation Trees, In *Proceedings of the 6th European Conference on Wireless Sensor Networks(EWSN)*, February, 2009.
22. L. Palopoli, R. Passerone, A.L. Murphy, G.P. Picco, and A. Giusti. Solving the Wake-up Scattering Problem Optimally, In *Proceedings of the 6th European Conference on Wireless Sensor Networks, (EWSN)*, Cork (Ireland), February 11-13, 2009. Springer Lecture Notes in Computer Science vol. 5432, pp. 166-182.
23. A. Förster, A.L. Murphy, J. Schiller, and K. Terflöth. An Efficient Implementation of Reinforcement Learning Based Routing on Real WSN Hardware, In *Proceedings of the 4th International Conference on Wireless and Mobile Computing, Networking, and Communications (WiMob)*, October 2008.
24. D. Frey and A.L. Murphy. Failure-Tolerant Overlay Trees for Large-Scale Dynamic Networks, In *Proceedings of the 8th International Conference on Peer-to-Peer Computing (P2P)*, 2008.
25. A. Förster and A.L. Murphy. Balancing Energy Expenditure in WSNs through Reinforcement Learning: A Study, In *Proceedings of the Workshop on Energy in Wireless Sensor Networks (WEWSN)*, co-located with the International Conference on Distributed Computing in Sensor Systems (DCOSS), Santorini, Greece, June, 2008,

26. M. Lanza, A.L. Murphy, R. Robbes, M. Lungu, P. Bonzini, M. D'Ambros, R. Wettel. A Teamwork-Based Approach to Programming Fundamentals with Scheme, Smalltalk & Java, In *Proceedings of the 30th International Conference on Software Engineering (ICSE)*, Education Track, Leipzig, Germany, pp. 787-790, ACM Press, May 2008
27. M. Ceriotti, A.L. Murphy, and G.P. Picco. Data Sharing vs. Message Passing: Synergy or Incompatibility? An Implementation-Driven Case Study, In *Proceedings of the 23rd Annual ACM Symposium on Applied Computing (SAC)*, Fortaleza, Brazil, March 2008.
28. A. Egorova-Förster and A.L. Murphy. Exploring Non Uniform Quality of Service for Extending WSN Lifetime, In *Proceedings of the 3rd International Workshop on Sensor Networks and Systems for Pervasive Computing (PerSeNS)*, co-located with the 5th International Conference on Pervasive Computing and Communications (PerCom), White Plains, NY, USA, March, 2007.
29. A. Egorova-Förster and A.L. Murphy. A Feedback-Enhanced Learning Approach for Routing in WSN, In *4th Workshop on Mobile Ad Hoc Networks (WMAN)*, Bern, Switzerland March, 2007.
30. A. Giusti, A.L. Murphy, and G.P. Picco. Decentralized Scattering of Wake-up Times in Wireless Sensor Networks. In *Proceedings of the 4th European Conference on Wireless Sensor Networks (EWSN)*, Delft, The Netherlands, Lecture Notes on Computer Science, Volume 4373. Springer, pp. 245-260. January 2007.
31. P. Costa, L. Mottola, A.L. Murphy, and G.P. Picco. TeenyLIME: Transiently Shared Tuple Space Middleware for Wireless Sensor Networks. In *Proceedings of the International Workshop on Middleware for Sensor Networks (MidSense)*, co-located with the 7th International Middleware Conference (Middleware), Melbourne, Australia, November, 2006.
32. L. Mottola, A.L. Murphy, and G.P. Picco. Demonstrating Pervasive Game Development using Tiny Devices and the TinyLIME Middleware, In *Proceedings of the 5th Workshop on Network and System Support for Games (NetGames)*, Singapore, October, 2006.
33. G.P. Picco, M. Migliavacca, A.L. Murphy, and G.-C. Roman. Distributed Abstract Data Types. In *Proceedings of the 8th International Symposium on Distributed Objects and Applications (DOA)*, Montpellier, France, October, 2006.
34. A.L. Murphy and G.P. Picco. Using LIME to Support Replication for Availability in Mobile Ad Hoc Networks. To be published in *Proceedings of the 8th International Conference on Coordination Models and Languages (Coordination)*. June 2006.
35. A.L. Murphy, G.P. Picco, and G.-C. Roman, LIME: A Coordination Middleware Supporting Mobility of Hosts and Agents. In *ACM Transactions on Software Engineering and Methodology* 2006.
36. C. Curino, M. Giani, M. Giorgetta, A. Giusti, A.L. Murphy, and G.P. Picco. Mobile Data Collection in Sensor Networks: The TinyLIME Middleware Journal of Pervasive and Mobile Computing - Special issue on PerCom 2005. Volume 1, Issue 4. Pages 446-469. December 2005.
37. C. Curino, M. Giani, M. Giorgetta, A. Giusti, A.L. Murphy, and G.P. Picco. TinyLIME: Bridging Mobile and Sensor Networks through Middleware. *Proceedings of the 3rd IEEE International Conference on Pervasive Computing and Communications (PerCom)*. March 2005.
38. G. Cugola, D. Frey, A.L. Murphy, and G.P. Picco, Minimizing the Reconfiguration Overhead in Content-Based Publish-Subscribe. in *Proceedings of the 19th ACM Symposium on Applied Computing (SAC'04)*. March 2004.
39. A.L. Murphy and G.P. Picco. Using Coordination Middleware for Location-Aware Computing: A LIME Case Study. in *Proceedings of the 6th International Conference on Coordination Models and Languages (Coordination'04)*. February 2004.

40. W.B. Heinzelman, A.L. Murphy, H.S. Carvalho, and M.A. Perillo, Middleware to Support Sensor Network Applications. in *IEEE Network*, Special Issue on Middleware Technologies for Future Communication Networks. January 2004.
41. S. Tilak, A.L. Murphy, and W.B. Heinzelman, Non-uniform Information Dissemination for Sensor Networks. in *Proceedings of the 11th International Conference on Network Protocols (ICNP'03)*, Atlanta, GA, USA, November 2003.
42. H.S. Carvalho, A.L. Murphy, W.B. Heinzelman, and C.J.N. Coelho, Network-Based Distributed Systems Middleware. in *Proceedings of the 1st International Workshop on Middleware for Pervasive and Ad-Hoc Computing (MPAC'03)* co-located with Middleware 2003, Rio de Janeiro, Brazil, July 2003.
43. H.S. Carvalho, W.B. Heinzelman, A.L. Murphy, and C.J.N. Coelho, A General Data Fusion Architecture. in *Proceedings of the 6th International Conference on Information Fusion*, Cairns, Australia, June 2003.
44. G.P. Picco, G. Cugola, and A.L. Murphy. Efficient Content-Based Event Dispatching in Presence of Topological Reconfiguration. in *Proceedings of the International Conference on Distributed Computing Systems (ICDCS'03)*, Providence, RI (USA), May 2003.
45. A.L. Murphy, G.-C. Roman, G. Varghese, Tracking Mobile Units for Dependable Message Delivery. *IEEE Transactions on Software Engineering*, pp. 433–448, May 2002.
46. G.P. Picco, A.L. Murphy and G.-C. Roman. On Global Virtual Data Structures. *Process Coordination and Ubiquitous Computing*, D. Marinescu and C. Lee eds., CRC Press, pp. 11–29, 2002.
47. G. Cugola, G.P. Picco, and A.L. Murphy, Towards Dynamic Reconfiguration of Distributed Publish-Subscribe Middleware. in *Third International Workshop on Software Engineering and Middleware (SEM'02)*, co-located with ICSE'02, Orlando, FL (USA), May 2002.
48. G.-C. Roman, C. Julien, and A.L. Murphy, A Declarative Approach to Agent-Centered Context-Aware Computing in Ad Hoc Wireless Environments. in *Software Engineering for Large-Scale Multi-Agent Systems (SELMAS'02)*, co-located with ICSE'02, Orlando, FL (USA), May 2002.
49. A.L. Murphy, G.P. Picco, Reliable Communication for Highly Mobile Agents. in *Journal of Autonomous Agents and Multi-Agent Systems*, Special issue on Mobile Agents. Danny Lange ed., pp 81–100, 2002.
50. X. Chen and A.L. Murphy, Enabling Disconnected Transitive Communication in Mobile Ad Hoc Networks. in *Workshop on Principles of Mobile Computing (POMC'01)*, co-located with PODC'01, Newport, RI (USA), pp 21–27, August 2001.
51. A.L. Murphy and X. Chen, Enabling Disconnected Communication. in *Workshop on Software Engineering and Mobility*, co-located with ICSE'01, Toronto (Canada), May 2001.
52. A.L. Murphy, G.P. Picco, and G.-C. Roman, Lime: A Middleware for Physical and Logical Mobility. in *Proceedings of the International Conference on Distributed Computing Systems (ICDCS'01)*, Phoenix, AZ (USA), pp 524–533, April 2001.
53. A.L. Murphy, G.P. Picco, and G.-C. Roman, Developing Mobile Computing Applications with LIME. In *Proceedings of the 22th International Conference on Software Engineering (ICSE'00)*, Limerick (Ireland), M. Jazayeri and A. Wolf eds., ACM Press, June 2000, pp. 766–769. (Formal research demonstration).
54. A.L. Murphy and G.P. Picco. Reliable communication for highly mobile agents. In *Proceedings of the 1st International Symposium on Agent Systems and Applications and 3rd International Symposium on Mobile Agents (ASA/MA '99)*, pages 141–150, Palm Springs, CA, USA, October 1999.
55. G.P. Picco, A.L. Murphy, and G.-C. Roman. LIME: Linda meets mobility. In *Proceedings of the 21st International Conference on Software Engineering (ICSE'99)*, pages 368–377, Los Angeles, CA, USA, May 1999.

56. A.L. Murphy. Algorithm development in the mobile environment. In *Proceedings of the 21st International Conference on Software Engineering (ICSE'99), Doctoral Workshop*, pages 728–729, Los Angeles, CA, USA, May 1999. (Abstract).
57. A.L. Murphy, G.-C. Roman, and G. Varghese. An exercise in formal reasoning about mobile computations. In *Proceedings of the 9th International Workshop on Software Specification and Design*, pages 25–33, Ise-Shima, Japan, 1998.
58. A.L. Murphy, G.-C. Roman, and G. Varghese. An algorithm for message delivery to mobile units. In *Proceedings of the 16th Annual ACM Symposium on Principles of Distributed Computing (PODC'97)*, Santa Barbara, CA, USA, 1997. (Abstract).
59. D. Baughman, R.F. Gamble, and A.L. Murphy. Using formal specification to design verifiable hybrid knowledge based systems. In *Proceedings of the 7th AAAI Workshop of Verification and Validation of Knowledge Based Systems*, Seattle, WA, USA, August 1994.

INVITED PUBLICATIONS

1. G.P. Picco, C. Julien, A.L. Murphy, M. Musolesi, G.-C. Roman. "Software Engineering for Mobility: Reflecting on the Past, Peering into the Future", In *Proceedings of the 34th ACM/IEEE International Conference on Software Engineering (ICSE)*. Invited paper in the Future of Software Engineering (FOSE) track, Hyderabad, India, June 2014.
2. P. Costa, L. Mottola, A.L. Murphy, and G.P. Picco. Tuple Space Middleware for Wireless Networks, Invited contribution to the book *Middleware for Network Eccentric and Mobile Applications*, B. Garbinato, H. Miranda, and L. Rodrigues eds. Springer, 2009.
3. A.L. Murphy and G.P. Picco. SLIME in *Proceedings of the Euro-American Workshop on Middleware for Sensor Networks* co-located with the 2nd International Conference on Distributed Computing in Sensor Systems *DCOSS*. San Francisco (CA, USA), June 2006.
4. G. Cugola, A.L. Murphy, and G.P. Picco. Content-based Publish-Subscribe in a Mobile Environment. in *Mobile Middleware*. CRC Press. P. Bellavista, A. Corradi eds.
5. W.B. Heinzelman, A.L. Murphy, and M.A. Perillo. Enabling Data- and Event-Centric Communications. in *Wireless Sensor Networks: A Systems Perspective*. Artech House. N. Bulusu and S. Jha eds.
6. A.L. Murphy, G.-C. Roman, and G. Varghese. Dependable Message Delivery to Mobile Units. in *Mobile Computing Handbook*. CRC Press. I. Mahgoub and M. Ilyas eds. pp 227–252, 2005.
7. G.P. Picco, A.L. Murphy, and G.-C. Roman. Developing Mobile Applications: A LIME Primer. in *Mobile Computing Handbook*. CRC Press. I. Mahgoub and M. Ilyas eds. pp. 25–52, 2005.
8. A.L. Murphy, G.P. Picco, and G.-C. Roman. Software Architecture for Mobile Computing. in *Formal Methods for Software Architectures: SFM-03:SA Lectures* M. Bernardo and P. Inverardi eds. Springer. LNCS 2804. 2003.
9. G.-C. Roman, C. Julien, and A.L. Murphy. A Declarative Approach to Agent-Centered Context-Aware Computing in Ad Hoc Wireless Environments. in *Software Engineering for Large-Scale Multi-Agent Systems: Research Issues and Practical Applications* A. Garcia, C. Lucena, F. Zambonelli, A. Omicini, and J. Castro eds. Springer. LNCS 2603. 2003.
10. G.-C. Roman, A.L. Murphy, G.P. Picco, Coordination and Mobility. in *Coordination of Internet Agents: Models, Technologies, and Applications*, A. Omicini, F. Zambonelli, M. Klusch, R. Tolksdorf eds., Springer, pp 249–273, 2001.
11. G.-C. Roman, A.L. Murphy, and G.P. Picco. Software engineering for mobility: A roadmap. In A. Finkelstein, editor, *Future of Software Engineering*. June 2000.

RESEARCH FUNDING

1. Province of Trento: BearFence: Sistema Tecnologica integrato di Dissuasione e Rieducazione di Orsi Problematici e Dannosi. Amount: 19,500 EUR. Dates: 2016.
2. European Institute of Innovation and Technology, Research Project: I3C: Intelligent Integrated critical Infrastructures for smarter future Cities Amount: 40,000 EUR. Dates: 2015.
3. European Institute of Innovation and Technology, Research Project: From WSN to CPS Testbeds. Amount: 64,000. Dates: 2012-2013.
4. Province of Trento, Grandi Progetti: ACube: Ambient Aware Assistance. Amount: 150,000 EUR. Dates: 2008-2012.
5. Province of Trento: Natural Risk Sensing Amount: 30,000 EUR. Dates 2011-2012.
6. European Union Network of Excellence: CONET (associate member) Amount: 15,000 EUR. Dates: 2010-1012
7. Province of Trento: *TRITon : Trentino Research and Innovation for Tunnel Monitoring*. Amount: 150,000 EUR. Dates: 2007-2010
8. Swiss National Science Foundation: *Extending Sensor Network Lifetime with Middleware that Actively Manipulates Network Parameters*. Amount: 82,522 CHF. Dates: October 05 - October 07
9. National Competence Center in Research — Mobile Information and Communication Systems: *Middleware for Non-Uniform Information Dissemination in Sensor Networks*. Amount: 198,000 CHF. Dates: October 05 - October 09
10. University of Rochester Center for Future Health: *Architecture for a Smart Medical Home Sensor/Actuator Network*. Co-PI: W. Heinzelman. Amount: \$30,000. Dates: 03/15/02 - 03/15/03.
11. Infotonics Center of Excellence: *Biophotonic Sensing of Harmful Pathogens and Biowarfare Agents*. PI: P. Fauchet. Amount: \$34,750. Dates: 05/01/02 - 09/30/03.

PROFESSIONAL ACTIVITIES

1. Co-Vice-Chair (with Christine Julien (Chair), Univ. of Texas at Austin, USA, Qi Han, Colorado School of Mines, USA, Franca Delmastro, IIT-CNR, Italy). IEEE International Conference on Pervasive Computing and Communications (PerCom). Hawaii, 2017.
2. Co-Chair (with Eli Tilevich, Univ. of Virginia, USA): 16th ACM/IFIP/USENIX International Middleware Conference (Middleware). Vancouver, Canada, December 2015.
3. Co-Chair (with Bhaskar Krishnamachari, Univ. of Southern California, USA) 11th European Conference on Wireless Sensor Networks (EWSN). Oxford, UK, 2014.
4. Co-Chair (with Jan Vitek, Purdue Univ., USA): 9th International Conference on Coordination Models and Languages (Coordination). Paphos, Cyprus, June 2007.
5. Panel member (title: How Much is too Much? Explosion in Sensor Networking Research and Applications): 5th Conference on Pervasive Computing and Communications (PerCom), White Plains, NY. March 2007.
6. Workshop Program Co-Chair (with Matthew Dwyer, Univ. of Nebraska): 6th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE). Dubrovnik, Croatia. September 2007.
7. Co-Chair (with Elisabetta Di Nitto, Politecnico di Milano, Italy): Fifth International Workshop on Software Engineering and Middleware (SEM). Lisbon, Portugal. September 2005.
8. Webmaster: 27th International Conference on Software Engineering (ICSE'05) St. Louis, Missouri. May 2005.

9. Publicity Chair: 19th ACM Symposium on Operating Systems Principles (SOSP'03), Bolton Landing (Lake George), New York, October 2003.
10. Invited lecturer at the 3rd International School on Formal Methods for the Design of Computer, Communication and Software Systems: Software Architecture. Lecture title: Software Architecture for Mobility. September 2003.
11. Invited lecturer at the Advanced School on Mobile Computing, sponsored by Scuola Normale Superiore di Pisa and The LIST Group. Lecture title: Software Development for Mobile Computing. September 2003.
12. Co-Chair (with Cecilia Mascolo, University College, London): First International ICDCS Workshop on Mobile Computing Middleware (MCM03). Providence, Rhode Island. May 2003.
13. Program committee member:
 - ACM Conference on Embedded Networked Sensor Systems 2012, 2014, 2015 (SenSys)
 - IEEE International Conference on Mobile Ad hoc and Sensor Systems 2012, 2015, 2016 (MASS)
 - European Workshop on Sensor Networks 2006, 2007 (EWSN)
 - International Conference on Pervasive Computing and Communications 2005, 2006 (PerCom)
 - Automated Software Engineering 2006 (ASE)
 - International Conference on Software Engineering 2005 (ICSE)
 - Workshop on End to End, Sense and Respond Systems, Applications, and Services, in conjunction with MobiSys, 2005, (ESSR)
 - International Conference on Parallel Processing 2004 (ICPP)
 - World Wide Web Conference, Mobility and Wireless Track 2004, 2006 (WWW)
 - Symposium on Applied Computing (multiple tracks) 2003, 2004, 2005 (SAC)
 - Mobile Agents 2001, 2002 (MA)
 - Web-based Infrastructures and Coordination Architectures for Collaborative Enterprises 2001, 2002(WetICE)
 - Principles of Mobile Computing 2002, 2003
 - Joint Conference on Autonomous Agents and Multi-Agent Systems, 2001, 2002(Agents)
14. Steering committee Middleware, 2015-present.
15. Steering committee Coordination, 2007-2010.
16. Steering committee Mobile Agents, 2001-2003.
17. Journal referee for several journals on distributed and mobile computing.
18. Association for Computing Machinery, member
19. IEEE Computer Society, member

TEACHING ACTIVITY

1. Fall 2005. Undergraduate Net Centric Computing (USI)
2. Spring 2005, 2006. Undergraduate Programming Fundamentals II (USI)
3. Fall 2004. Undergraduate Computer Architecture (USI)
4. Spring 2004. Graduate Distributed Computing Systems. (Politecnico, part of U. Illinois, Chicago joint master's program)
5. Fall 2002. Undergraduate Computation and Formal Systems. (UR)

6. Fall 2001. Undergraduate research course on Mobile Computing. (UR)
7. Spring 2001, 2002, 2003. Graduate and Undergraduate Operating Systems. (UR)
8. Fall 2000. Graduate seminar on Mobile Computing. (UR)