

**THE UNIVERSITY OF TEXAS AT AUSTIN
The Cockrell School of Engineering**

FULL NAME Christine Julien

TITLE Associate Professor

DEPARTMENT Electrical and Computer Engineering

EDUCATION

University	Fields of Study	Degree	Date
Washington University in Saint Louis	Computer Science	D.Sc.	August 2004
Washington University in Saint Louis	Computer Science	M.S.	May 2003
Washington University in Saint Louis	Applied Science (Computer Science and Biology)	B.S.	May 2000

CURRENT AND PREVIOUS ACADEMIC POSITIONS

University	Position	Years
The University of Texas at Austin	Associate Professor	2010-Present
The University of Texas at Austin	Assistant Professor	2004-2010
Washington University in Saint Louis	Graduate Research Assistant	2000-2004

JOURNAL PUBLICATIONS (* indicates a supervised student or post-doc)

1. Nirmalya Roy, Archan Misra, Sajal K. Das, and Christine Julien, "Determining Quality- and Energy-Aware Multiple Contexts in Pervasive Computing Environments," *IEEE/ACM Transactions on Networking*, (to appear).
2. Nirmalya Roy, Christine Julien, Archan Misra, Sajal K. Das, "Quality and Context Aware Smart Healthcare," *IEEE Systems, Man, and Cybernetics Magazine*, (to appear).
3. Xi Zheng*, Christine Julien, Miryung Kim, and Sarfraz Khurshid, "Perceptions on the State of the Art in Verification and Validation in Cyber Physical Systems," *IEEE Systems Journal*, (to appear).
4. Jonas Michel*, Christine Julien, and Jamie Payton, "Gander: Mobile, Pervasive Search of the Here and Now in the Here and Now," *IEEE IoT Journal*, Vol. 1, No. 5, pp. 483-496, October 2014.
5. Christine Julien, Jamie Payton, "Engaging the Masses in Pervasive Computing: A Missed Opportunity?" *IEEE Internet Computing*, Vol. 16, No. 5, pp. 74-77, October 2012.
6. Jamie Payton, Christine Julien, Vasanth Rajamani*, and Gruia-Catalin Roman, "Using Snapshot Query Fidelity to Adapt Continuous Query Execution," *Pervasive and Mobile Computing*, Vol. 8, No. 3, pp. 317-330, June 2012.
7. Nirmalya Roy*, Sajal K. Das, and Christine Julien, "Resource-Optimized Quality-Assured Ambiguous Context Mediation Framework in Pervasive Environments," *IEEE Transactions on Mobile Computing*, Vol. 11, No. 2, pp. 218-229, February 2012.
8. Xiaowei Luo, William J. O'Brien, and Christine Julien, "Comparative Evaluation of Received Signal Strength Index (RSSI) Based Indoor Localization Techniques for Construction Jobsites," *Advanced Engineering Informatics*, Vol. 25, pp. 355-363, April 2011.

9. Jamie Payton, Christine Julien, Gruia-Catalin Roman, and Vasanth Rajamani*, "Semantic Self-Assessment of Query Results in Dynamic Environments," *ACM Transactions on Software Engineering and Methodology*, Vol. 19, No. 4, April 2010.
10. William J. O'Brien, Christine Julien, Sanem Kabadayı*, Xiaowei Luo, and Joachim Hammer, "An Architecture for Decision Support in Ad Hoc Sensor Networks," *Journal of Information Technology in Construction, Special Issue on Next Generation Construction IT: Technology Foresight, Future Studies, Roadmapping, and Scenario Planning*, Vol. 14, pp. 309-327, July 2009.
11. Vasanth Rajamani*, Sanem Kabadayı*, and Christine Julien, "An Interrelational Grouping Abstraction for Heterogeneous Sensors," *ACM Transactions on Sensor Networks*, Vol. 5, No. 3, Article 27, May 2009.
12. Christine Julien, Gruia-Catalin Roman, and Qingfeng Huang, "SICC: Source-Initiated Context Construction in Mobile Ad Hoc Networks," *IEEE Transactions on Mobile Computing*, Vol. 7, No. 4, pp. 401-415, April 2008.
13. Sanem Kabadayı* and Christine Julien, "Scenes: Abstracting Interaction in Immersive Sensor Networks," *Pervasive and Mobile Computing*, Vol. 3, No., 6, pp. 635-658, December 2007.
14. Gruia-Catalin Roman, Christine Julien, and Jamie Payton, "Modeling Adaptive Behaviors in Context UNITY," *Theoretical Computer Science*, Vol. 376, No. 3, pp. 185-204, May 2007.
15. Christine Julien and Gruia-Catalin Roman, "EgoSpaces: Facilitating Rapid Development of Context-Aware Mobile Applications," *IEEE Transactions on Software Engineering*, Vol. 32, No. 5, pp. 281-298, May 2006.
16. Christine Julien, Jamie Payton, and Gruia-Catalin Roman, "Reasoning about Context-Awareness in the Presence of Mobility," *Electronic Notes in Theoretical Computer Science*, Vol. 97, pp. 259-276, July 2004.
17. Qingfeng Huang, Christine Julien, and Gruia-Catalin Roman, "Relying on Safe Distance to Achieve Strong Partitionable Group Membership in Ad Hoc Networks," *IEEE Transactions on Mobile Computing*, Vol. 3, No. 2, pp. 192-205, April-June 2004.

CONFERENCE AND WORKSHOP PAPERS

18. Jonas Michel* and Christine Julien. "From Human Mobility to Data Mobility: Leveraging Spatiotemporal History in Device-to-Device Information Diffusion," in *Proceedings of the 17th IEEE International Conference on Mobile Data Management*, June 2016 (**25% acceptance rate**).
19. Nathaniel Wendt* and Christine Julien. "Mason: An Open Development Contextual Reasoning Framework Enabling Adaptive Applications," in *Proceedings of the 3rd IEEE/ACM International Conference on Mobile Software Engineering and Systems*, May 2016 (**33% acceptance rate**).
20. Tomasz Kalbarczyk* and Christine Julien. "XD (Exchange-Deliver): A Middleware for Developing Device-to-Device Mobile Applications," in *Proceedings of the 3rd IEEE/ACM International Conference on Mobile Software Engineering and Systems (Mobile Applications Track)*, May 2016.
21. Sungmin Cho* and Christine Julien. "CHITCHAT: Navigating Tradeoffs in Device-to-Device Context Sharing," in *Proceedings of the 2016 IEEE International Conference on Pervasive Computing and Communications*, March 2016 (**15% acceptance rate, received the Mark Weiser Best Paper Award**).
22. Chenguang Liu* and Christine Julien. "Pervasive Context Sharing in Magpie: Adaptive Trust-Based Privacy Protection," in *Proceedings of the 7th EAI International Conference on Mobile Computing, Applications and Services*, November 2015 (**37% acceptance rate**).
23. Xi Zheng*, Christine Julien, Rodion Podorozhny, and Franck Cassez. "BraceAssertion: Runtime Verification of Cyber-Physical Systems," in *Proceedings of the 12th International Conference on Mobile Ad-hoc and Sensor Systems*, October 2015 (**26% acceptance rate**).

24. Sungmin Cho* and Christine Julien. "The Grapevine Context Processor: Application Support for Efficient Context Sharing," in *Proceedings of the 2nd International Conference on Mobile Software Engineering and Systems*, May 2015 (**19% acceptance rate**).
25. Xi Zheng* and Christine Julien. "Verification and Validation in Cyber Physical Systems: Research Challenges and a Way Forward," in *Proceedings of the International Workshop on Software Engineering for Smart Cyber-Physical Systems (SEsCPS)*, co-located with ICSE 2015, May 2015.
26. Venkat Srinivasan*, Tomasz Kalbarczyk*, and Christine Julien. "Disseminate: A Demonstration of Device-to-Device Media Dissemination," in *Proceedings of the IEEE International Conference on Pervasive Computing and Communications (Demonstrations)*, March 2015.
27. Tomas Díaz* and Christine Julien. "MoodChat: Using Context-Awareness to Connect Likeminded Co-Located Individuals," in *Proceedings of the IEEE International Conference on Pervasive Computing and Communications (Demonstrations)*, March 2015.
28. Sungmin Cho* and Christine Julien. "Efficient Decentralized Context Sharing via Smart Aggregation," in *Proceedings of the 11th IEEE International Conference on Mobile Ad-Hoc and Sensor Systems*, October 2014 (**27% acceptance rate**).
29. Kathryn McArdle* and Christine Julien. "BALANCE: Budget-Driven Smart Thermostat Control," in *Proceedings of the 2014 IEEE International Workshop on Intelligent Energy Systems*, October 2014.
30. Tomasz Kalbarczyk*, Brenton Walker, Christine Julien, Angela Hennessy, Pedro Santacruz*, Jonas Michel*, and Amy Alford. "The Breadcrumb Router: Bundle Trajectory Tracking and Geographic Source Routing in DTN," in *Proceedings of the 6th Extreme Conference on Communication and Computing*, August 2014.
31. Venkat Srinivasan* and Christine Julien. "MadApp: A Middleware for Opportunistic Data in Mobile Web Applications," in *Proceedings of the IEEE International Conference on Mobile Data Management*, July 2014 (**46% acceptance rate**).
32. Nirmalya Roy and Christine Julien. "Immersive Physiotherapy: Challenges for Smart Living Environments and Inclusive Communities," in *Proceedings of the International Conference on Smart Homes and Health Telematics*, June 2014.
33. Gian Pietro Picco, Christine Julien, Amy L. Murphy, Mirco Musolesi, and Gruia-Catalin Roman. "Software Engineering for Mobility: Reflecting on the Past, Peering into the Future," in *Proceedings of the Future of Software Engineering*, co-located with ICSE 2014, June 2014.
34. Xi Zheng*, Dewayne Perry, and Christine Julien. "BraceForce: A Middleware to Enable Sensing Integration in Mobile Applications for Novice Programmers," in *Proceedings of the 1st International Conference on Mobile Software Engineering and Systems*, June 2014. (**30% acceptance rate**)
35. Xi Zheng*, Dewayne Perry, and Christine Julien. "WiP: BraceForce: Software Engineering Support for Sensing in CPS Applications," in *Proceedings of the 5th International Conference on Cyber-Physical Systems (ICCPs)*, Work-in-Progress, April 2014.
36. Venkat Srinivasan* and Christine Julien. "Demo: MadApp: Dynamic Content Support for Delay-Tolerant Web Applications," in *Proceedings of the 2014 IEEE International Conference on Pervasive Computing and Communications Demonstrations (PerCom)*, March 2014.
37. Michael Xing* and Christine Julien. "Trust-Based, Privacy-Preserving Context Aggregation and Sharing in Mobile Ubiquitous Computing," in *Proceedings of the 10th International ICST Conference on Mobile and Ubiquitous Computing (MobiQuitous)*, December 2013. (**30% acceptance rate**)
38. Jonas Michel* and Christine Julien. "A Cloudlet-Based Proximal Discovery Service for Machine-to-Machine Applications," in *Proceedings of the 5th International Conference on Mobile Computing, Applications, and Services (MobiCASE)*, November 2013. (**20% acceptance rate**)

39. Evan Grim* and Christine Julien. "Spitty Bifs are Spiffy Bits: Interest-Based Context Dissemination Using Spatiotemporal Bloom Filters," in *Proceedings of the 9th International ICST Conference on Mobile and Ubiquitous Systems (Mobiquitous)*, December 2012.
40. Christine Julien, Agoston Petz*, and Evan Grim. "Rethinking Context for Pervasive Computing: Adaptive Shared Perspectives," in *Proceedings of the 12th International Symposium on Pervasive Systems, Algorithms, and Networks (ISPAN)*, December 2012. **(invited paper)**
41. Tsz-Chiu Au, Chien-Liang Fok*, Sriram Vishwanath, Christine Julien, and Peter Stone. "Evasion Planning for Autonomous Vehicles at Intersections," in *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, October 2012. **(45% acceptance rate)**
42. Agoston Petz*, Anders Lindgren, Pan Hui, and Christine Julien. "MADServer: An Architecture for Opportunistic Mobile Advanced Delivery," in *Proceedings of the ACM MobiCom Workshop on Challenged Networks (CHANTS)*, August 2012. **(30% acceptance rate)**
43. Agoston Petz*, Chien-Liang Fok*, and Christine Julien. "Experiences Using a Miniature Vehicular Network Testbed," in *Proceedings of the 9th ACM International Workshop on Vehicular Internet Networking, Systems, and Applications*, June 2012. **(32% acceptance rate)**
44. Kevin Boos*, Chien-Liang Fok*, Christine Julien, and Miryung Kim. "Brace: An Assertion Framework for Debugging Cyber-Physical Systems," in *Proceedings of the 34th International Conference on Software Engineering (New Ideas and Emerging Results)*, June 2012. **(18% acceptance rate)**
45. Noa Agmon, Chien-Liang Fok*, Yehuda Emaliah, Peter Stone, Christine Julien, and Sriram Vishwanath. "On Coordination in Practical Multi-Robot Patrol," in *Proceedings of the International Conference on Robotics and Automation*, May 2012. **(40% acceptance rate)**
46. Chien-Liang Fok*, Maykel Hanna*, Seth Gee*, Tsz-Chiu Au, Peter Stone, Christine Julien, and Sriram Vishwanath. "A Platform for Evaluating Autonomous Intersection Management Policies," in *Proceedings of the ACM/IEEE 3rd International Conference on Cyber-Physical Systems*, April 2012. **(34% acceptance rate)**
47. Agoston Petz*, Angela Hennessy, Brenton Walker, Chien-Liang Fok*, and Christine Julien. "An Architecture for Context-Aware Adaptation of Routing in Delay-Tolerant Networks," in *Proceedings of the 4th Extreme Conference on Communications*, March 2012.
48. Jonas Michel*, Christine Julien, Jamie Payton, and Gruia-Catalin Roman. "A Spatiotemporal Model for Ephemeral Data in Pervasive Computing Networks," in *Proceedings of the 1st International IEEE Workshop on Hot Topics in Pervasive Computing (PerHot, co-located with PerCom)*, March 2012.
49. Evan Grim*, Chien-Liang Fok*, and Christine Julien. "Grapevine: Efficient Situational Awareness in Pervasive Computing Environments," in *Proceedings of the IEEE International Conference on Pervasive Computing and Communications (PerCom WiP)*, March 2012.
50. Jonas Michel*, Christine Julien, Jamie Payton, and Gruia-Catalin Roman. "myGander: A Mobile Interface and Distributed Search Engine for Pervasive Computing," in *Proceedings of the IEEE International Conference on Pervasive Computing and Communications (PerCom Demonstrations)*, March 2012.
51. Jonas Michel*, Christine Julien, Jamie Payton, and Gruia-Catalin Roman. "Gander: Personalizing Search of the Here and Now," in *Proceedings of the 8th International ICST Conference on Mobile and Ubiquitous Systems (Mobiquitous)*, December 2011. **(32% acceptance rate)**.
52. Agoston Petz*, Chien-Liang Fok*, Christine Julien, Brenton Walker, and Calvin Ardi, "Network Coded Routing in Delay Tolerant Networks: An Experience Report," in *Proceedings of the 3rd Extreme Conference on Communication (ExtremeCom)*, September 2011.
53. Brenton Walker, Calvin Ardi, Agoston Petz*, Jung Ryu, and Christine Julien, "Experiments on the Spatial Distribution of Network Code Diversity in Segmented DTNs," in *Proceedings of the ACM MobiCom Workshop on Challenged Networks (CHANTS)*, September 2011.

54. Christine Julien, "The Context of Coordinating Groups in Dynamic Mobile Environments," in *Proceedings of the 13th International Conference on Coordination Models and Languages (Coordination)*, June 2011, pp. 49-64 **(40% acceptance rate)**.
55. Agoston Petz*, Taesoo Jun*, Nirmalya Roy*, Chien-Liang Fok*, and Christine Julien, "Passive Network-Awareness for Dynamic Resource-Constrained Networks", in *Proceedings of the 11th International IFIP Conference on Distributed Applications and Interoperable Systems (DAIS)*, June 2011, pp. 106-121 **(32% acceptance rate)**.
56. Chien-Liang Fok*, Christine Julien, Gruia-Catalin Roman, and Chenyang Lu, "Satisfying Multiple Stakeholders: Quality of Service in the Internet of Things," in *Proceedings of the 2nd International Workshop on Software Engineering for Sensor Network Applications (SESENA)*, May 2011.
57. Nirmalya Roy*, Archan Misra, Christine Julien, Sajal Das, and Jit Biswas, "An Energy-Efficient Quality-Adaptive Framework for Multi-Modal Sensor Context Recognition," in *Proceedings of the IEEE International Conference on Pervasive Computing and Communications (PerCom)*, March 2011, pp. 63-73 **(11% acceptance rate, nominated for Mark Weiser Best Paper Award)**.
58. Christine Julien, Vasanth Rajamani*, Jamie Payton, and Gruia-Catalin Roman, "Fidelity-Based Continuous Query Introspection and Adaptation," in *Proceedings of the PerCom Workshop on Information Quality and Quality-of-Service for Pervasive Computing (IQ2S)*, March 2011, pp. 56-61 **(invited paper)**.
59. Seth Holloway* and Christine Julien, "The Case for End-User Programming of Ubiquitous Computing Environments," in *Proceedings of the Foundations of Software Engineering and NITR&D/SPD Working Conference on the Future of Software Engineering Research*, November 2010.
60. Jamie Payton and Christine Julien, "Integrating Participatory Sensing in Application Development Practices," in *Proceedings of the Foundations of Software Engineering and NITR&D/SPD Working Conference on the Future of Software Engineering Research*, November 2010.
61. Agoston Petz*, Brenton Walker, Calvin Ardi, and Christine Julien, "The Click Convergence Layer: Putting a Modular Router under DTN2," in *Proceedings of the 2nd Extreme Workshop on Communication*, September 2010. **(Best Student Paper Award)**
62. Taesoo Jun*, Nirmalya Roy*, and Christine Julien, "Modeling Delivery Delay for Flooding in Mobile Ad Hoc Networks," in *Proceedings of the IEEE International Conference on Communications*, May 2010.
63. Vasanth Rajamani* and Christine Julien, "Blurring Snapshots: Temporal Inference of Missing and Uncertain Data," in *Proceedings of the 8th Annual IEEE International Conference on Pervasive Computing and Communications*, March-April 2010, pp. 40-50. **(12% acceptance rate)**
64. Nirmalya Roy*, Vasanth Rajamani*, and Christine Julien, "Supporting Multi-Fidelity-Aware Concurrent Applications in Dynamic Sensor Networks," in *Proceedings of the 2nd International Workshop on Information Quality and Quality of Service for Pervasive Computing*, March 2010 (invited paper).
65. Agoston Petz* and Christine Julien, "The MaDMAN Middleware for Delay-Tolerant Networks," in *Proceedings of the 11th Workshop on Mobile Computing Systems and Applications (HotMobile)*, February 2010, pp. 104.
66. Vasanth Rajamani* and Christine Julien, "SAMA: Static Analysis for Mobile Applications," in *Proceedings of the 11th Workshop on Mobile Computing Systems and Applications (HotMobile)*, February 2010, pp. 103.
67. Nirmalya Roy*, Kevin M. Brooks, and Christine Julien, "Usability of Semantic Web for Enhancing Digital Living Experience," in *Proceedings of the 2010 IEEE Consumer Communications and Networking Conference – Smart Spaces and Personal Area Networks for CE*, January 2010. **(33% acceptance rate)**
68. Vasanth Rajamani*, Christine Julien, Jamie Payton, and Gruia-Catalin Roman, "PAQ: Persistent Adaptive Query Middleware for Dynamic Environments," in *Proceedings of the ACM/IFIP/USENIX 10th International Middleware Conference*, December 2009. **(19% acceptance rate)**

69. Nirmalya Roy*, [Christine Julien](#), and Sajal K. Das, "Resource-Optimized Quality-Assured Ambiguous Context Mediation in Pervasive Environments," in *Proceedings of the 6th International ICST Conference on Heterogeneous Networking for Quality, Reliability, Security, and Robustness*, November 2009, pp. 232-248. **(50% acceptance rate, Best Paper Award)**
70. Vasanth Rajamani* and [Christine Julien](#), "Adaptive Data Quality for Persistent Queries in Sensor Networks," in *Proceedings of the 6th International ICST Conference on Heterogeneous Networking for Quality, Reliability, Security, and Robustness*, November 2009, pp 131-147. **(50% acceptance rate)**
71. Nirmalya Roy*, [Christine Julien](#), and Sajal K. Das, "Resolving and Mediating Ambiguous Contexts for Pervasive Care Environments," in *Proceedings of the 6th Annual International Conference on Mobile and Ubiquitous Systems: Computing, Networking, and Services*, July 2009.
72. Xiwei Luo, William J. O'Brien, and [Christine Julien](#). "Evaluation of Localization Techniques for the Construction Jobsite," in *Proceedings of Computing in Engineering: EG-ICE Conference 2009, Book Series of the Dept. of Civil Engineering, Technische Universität Berlin, Vol 1*. W. Huhnt (ed), July 2009, pp 202-209.
73. Vasanth Rajamani*, [Christine Julien](#), and Jamie Payton, "Automated Assessment of Aggregate Query Imprecision in Dynamic Environments," in *Proceedings of 9th International Conference on Distributed Applications and Interoperable Systems*, June 2009, pp. 59-72. **(38% acceptance rate)**
74. Nirmalya Roy*, Archan Misra, Sajal K. Das, and [Christine Julien](#), "Quality-of-Inference (QoINF)-Aware Context Determination in Assisted Living Environments," in *Proceedings of the 1st ACM International Workshop on Medical-Grade Wireless Networks*, May 2009, pp. 27-32.
75. Vasanth Rajamani*, [Christine Julien](#), Jamie Payton, and Gruia-Catalin Roman, "Inquiry and Introspection for Non-Deterministic Queries in Mobile Networks," in *Proceedings of Fundamental Approaches to Software Engineering*, March 2009. **(24% acceptance rate)**
76. Angela Dalton* and [Christine Julien](#), "Towards Adaptive Resource-Driven Routing," in *Proceedings of the 2009 IEEE International Conference on Pervasive Computing and Communications*, March 2009.
77. Seth Holloway*, Drew Stovall*, Jorge Lara-Garduno*, and [Christine Julien](#), "Opening Pervasive Computing to the Masses Using the SEAP Middleware," in *Proceedings of the IEEE Middleware Support for Pervasive Computing Workshop*, March 2009.
78. Agoston Petz*, Justin Enderle*, and [Christine Julien](#), "A Framework for Evaluating DTN Mobility Models," in *Proceedings of the Workshop on Scenarios for Network Evaluation Studies*, March 2009. **(21% acceptance rate)**
79. Taesoo Jun* and [Christine Julien](#). "Delay Analysis of Symmetric Node in Mobile Ad Hoc Networks," in *Proceedings of the 4th Workshop on Performance Monitoring, Measurement, and Evaluation of Heterogeneous Wireless and Wired Networks*, October 2009.
80. Drew Stovall*, Seth Holloway*, Jorge Lara-Garduno*, and [Christine Julien](#), "A Demonstration of Pervasive Device Integration with SEAP-Based Middleware," in *Proceedings of the 9th International Middleware Conference*, December 2008, pp. 62-65.
81. Agoston Petz* and [Christine Julien](#), "An Adaptive Middleware to Support Delay Tolerant Networking," in *Proceedings of the 7th Workshop on Reflective and Adaptive Middleware*, December 2008, pp 17-22. **(50% acceptance rate)**
82. Drew Stovall* and [Christine Julien](#), "Rapid Prototyping of Routing Protocols with Evolving Tuples," in *Proceedings of the 8th International Conference on Distributed Applications and Interoperable Systems*, June 2008, pp. 296-301. **(29% acceptance rate)**
83. Seth Holloway* and [Christine Julien](#), "ROCC: A Communication Overlay Abstraction for Wireless Users," in *Proceedings of the IEEE International Conference on Distributed Computing Workshops: 2nd International Workshop on Cooperative Distributed Systems (CDS)*, June 2008, pp. 435-440. **(65% acceptance rate)**

84. Taesoo Jun*, Angela Dalton*, Shreeshankar Bodas, Christine Julien, and Sriram Vishwanath, "Expressive Analytical Model for Routing Protocols in Mobile Ad Hoc Networks," in *Proceedings of the IEEE International Conference on Communications (ICC)*, May 2008, pp. 2134-2140. **(36% acceptance rate)**
85. Seth Holloway*, Drew Stovall*, Angela Dalton*, and Christine Julien, "So Many Sensors, So Little Data," in *Proceedings of the International Workshop on Software Architectures and Mobility* (co-located with *ICSE*), May 2008, pp. 53-55.
86. Christine Julien and Dewayne Perry, "Composable Context-Aware Architectural Connectors," in *Proceedings of the International Workshop on Software Architectures and Mobility* (co-located with *ICSE*), May 2008, pp. 43-45.
87. Angela Dalton*, Christine Julien, and Carla Ellis, "Enabling Deliberate Design for Energy Management in Pervasive Systems," in *Proceedings of the Middleware Support for Pervasive Computing Workshop* (co-located with *IEEE PerCom*), March 2008, pp. 520-524.
88. Seth Holloway*, Alex Griffith*, Angela Dalton*, Drew Stovall*, and Christine Julien, "SASSI: The Sliverware Architecture for Sensor System Integration," in *Proceedings of the 5th ACM Conference on Embedded Networked Sensor Systems*, November 2007, pp. 431-432.
89. Vasanth Rajamani*, Sanem Kabadayi*, and Christine Julien, "Query Domains: Grouping Heterogeneous Sensors Based on Proximity," in *Proceedings of the 3rd International Workshop on Heterogeneous Multi-Hop Wireless and Mobile Networks*, November 2007.
90. Jamie Payton, Christine Julien, and Gruia-Catalin Roman, "Automatic Consistency Assessment for Query Results in Dynamic Environments," in *Proceedings of the Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, September 2007, pp. 245—254. **(17% acceptance rate, ACM SIGSOFT Distinguished Paper Award)**
91. Drew Stovall* and Christine Julien, "Resource Discovery with Evolving Tuples," in *Proceedings of the International Workshop on Engineering Software Systems for Pervasive Environments* (co-located with *FSE*), September 2007, pp. 1—10.
92. Sanem Kabadayi*, Christine Julien, William J. O'Brien, and Drew Stovall*, "Virtual Sensors: A Demonstration," in the *26th Annual IEEE Conference on Computer Communications (Demonstrations)*, 2007. **(50% acceptance rate)**
93. William J. O'Brien, Christine Julien, Joachim Hammer, Sanem Kabadayi*, and Xiwei Luo, "An Architecture for Local Decision Support in Ad Hoc Sensor Networks," in *Proceedings of the ASCE 2007 International Workshop on Computing in Civil Engineering*, July 2007, pp. 769—776.
94. Sanem Kabadayi* and Christine Julien, "A Local Data Abstraction and Communication Paradigm for Pervasive Computing," in *Proceedings of the 5th Annual IEEE International Conference on Pervasive Computing and Communications*, March 2007, pp. 57-68. **(10% acceptance rate, nominated for Mark Weiser Best Paper Award)**
95. Taesoo Jun* and Christine Julien, "Automated Routing Protocol Selection in Mobile Ad Hoc Networks," in *Proceedings of the 22nd Annual ACM Symposium on Applied Computing, Mobile Computing and Applications Track*, March 2007, pp. 906-913. **(29% acceptance rate)**
96. Christine Julien, "Adaptive Preference Specifications for Application Sessions," in *Proceedings of the 4th International Conference on Service Oriented Computing*, Lecture Notes in Computer Science, volume 4294, December 2006, pp. 78-89. **(17% acceptance rate)**
97. Seth Holloway* and Christine Julien, "Developing Collaborative Applications Using Sliverware," in *Proceedings of the 14th International Conference on Cooperative Information Systems*, Lecture Notes in Computer Science, volume 4275, November 2006, pp. 587-604. **(28% acceptance rate)**
98. Joachim Hammer, Imran Hassan, Christine Julien, Sanem Kabadayi*, William J. O'Brien, and Jason Trujillo, "Dynamic Decision Support in Direct-Access Sensor Networks: A Demonstration," in

- Proceedings of the 3rd International Conference on Mobile Ad-Hoc and Sensor Systems (Demonstrations)*, October 2006. **(33% acceptance rate)**
99. Christine Julien and Meenakshi Venkataraman*, "Cross-Layer Discovery and Routing in Reconfigurable Wireless Networks," in *Proceedings of the 3rd International Conference on Mobile Ad-Hoc and Sensor Systems*, October 2006, pp. 119-128. **(25% acceptance rate)**
 100. Christine Julien and Drew Stovall*, "Enabling Ubiquitous Coordination Using Application Sessions," in *Proceedings of the 8th International Conference on Coordination Models and Languages*, June 2006, pp. 130-144. **(36% acceptance rate)**
 101. Sanem Kabadayi*, Adam Pridgen*, and Christine Julien, "Virtual Sensors: Abstracting Data from Physical Sensors," in *Proceedings of the 4th International Workshop on Mobile and Distributed Computing*, June 2006, pp. 587-592. **(36% acceptance rate)**
 102. Adam Pridgen* and Christine Julien, "A Secure Modular Mobile Agent System," in *Proceedings of the 5th International Workshop on Software Engineering for Large-Scale Multi-Agent Systems* (co-located with *ICSE*), May 2006, pp. 67-73.
 103. Raghavan Srinivasan* and Christine Julien, "Passive Network Awareness for Adaptive Mobile Applications," in *Proceedings of the 3rd International Workshop on Managing Ubiquitous Communications and Services*, (co-located with *Pervasive*), May 2006, pp. 222-31.
 104. Christine Julien, Joachim Hammer, and William J. O'Brien, "A Dynamic Programming Framework for Pervasive Computing Environments," in *Proceedings of the Workshop on Building Software for Pervasive Computing* (co-located with *OOPSLA*), October 2005.
 105. Gregory Hackmann, Christine Julien, Jamie Payton, and Gruia-Catalin Roman, "Supporting Generalized Context Interactions," in *Software Engineering and Middleware: 4th International Workshop, Revised Selected Papers*, T. Gschwind and C. Mascolo (editors), Lecture Notes in Computer Science, volume 3437, March 2005, pp. 91-106. **(35% acceptance rate)**
 106. Christine Julien, Jamie Payton, and Gruia-Catalin Roman, "Context-Sensitive Access Control for Open Mobile Agent Systems," in *Proceedings of the 3rd International Workshop on Software Engineering for Large-Scale Multi-Agent Systems* (co-located with *ICSE*), May 2004.
 107. Jamie Payton, Gruia-Catalin Roman, and Christine Julien, "Context-Sensitive Data Structures Supporting Software Development in Ad Hoc Mobile Settings," in *Proceedings of the 3rd International Workshop on Software Engineering for Large-Scale Multi-Agent Systems* (co-located with *ICSE*), May 2004.
 108. Gruia-Catalin Roman, Christine Julien, and Jamie Payton, "A Formal Treatment of Context-Awareness," in *Proceedings of the 7th International Conference on Fundamental Approaches to Software Engineering*, Lecture Notes in Computer Science, volume 2984, March 2004, pp. 12-16. **(invited paper)**
 109. Christine Julien and Gruia-Catalin Roman, "Active Coordination in Ad Hoc Networks," in *Proceedings of the 6th International Conference on Coordination Models and Languages*, February 2004, pp. 199-215. **(28% acceptance rate)**
 110. Radu Handorean, Jamie Payton, Gruia-Catalin Roman, and Christine Julien, "Coordination Middleware Supporting Rapid Deployment of Ad Hoc Mobile Systems," in *Proceedings of the 1st International ICDCS Workshop on Mobile Computing Middleware* (co-located with *ICDCS*), May 2003.
 111. Christine Julien and Gruia-Catalin Roman, "Egocentric Context-Aware Programming in Ad Hoc Mobile Environments," in *Proceedings of the 10th International Symposium on the Foundations of Software Engineering (FSE-10)*, November 2002, pp. 21-30. **(13% acceptance rate)**
 112. Gruia-Catalin Roman, Christine Julien, and Qingfeng Huang, "Network Abstractions for Context Aware Mobile Computing," in *Proceedings of the 24th International Conference on Software Engineering (ICSE)*, May 2002, pp. 363-373. **(15% acceptance rate)**

113. Gruia-Catalin Roman, Christine Julien, and Amy L. Murphy, "A Declarative Approach to Agent-Centered Context-Aware Computing in Ad Hoc Wireless Environments," in *Proceedings of the 1st International Workshop on Software Engineering for Large-Scale Multi-Agent Systems* (co-located with ICSE), May 2002.
114. Gruia-Catalin Roman, Christine Julien, and Qingfeng Huang, "Formal Specification and Design of Mobile Systems," in *Proceedings of the 7th International Workshop on Formal Methods for Parallel Programming: Theory and Applications*, April 2002.

BOOK CHAPTERS

115. Nirmalya Roy*, Sajal K. Das, and Christine Julien, "Resolving and Mediating Ambiguous Contexts in Pervasive Environments," *Smart Healthcare Applications and Services: Developments and Practices*, 2011, Chapter 6, pp. 122-147.
116. Christine Julien and Sanem Kabadayi*, "Enabling Programmable Ubiquitous Computing Environments: A Middleware Perspective," *Advances in Ubiquitous Computing: Future Paradigms and Directions*, 2008, Chapter 5, pp. 117-149.
117. Adam Pridgen* and Christine Julien, "SMASH: Modular Security for Mobile Agents," *Software Engineering for Large Scale Multi-Agent Systems V*, R. Choren et al. (editors), Lecture Notes in Computer Science 4408, August 2007, pp. 99-116.
118. Christine Julien and Gruia-Catalin Roman, "Supporting Context-Aware Interaction in Dynamic Multi-Agent Systems (invited paper)," *Environments for Multi-Agent Systems*, D. Weyns et al. (editors), Lecture Notes in Computer Science 3372, February 2005, pp. 168-189.
119. Christine Julien, Jamie Payton, and Gruia-Catalin Roman, "Adaptive Access Control in Coordination-Based Mobile Agent Systems," *Software Engineering for Multi-Agent Systems III*, R. Choren et al. (editors), Lecture Notes in Computer Science 3390, February 2005, pp. 254-271.
120. Gruia-Catalin Roman, Christine Julien, and Amy L. Murphy, "A Declarative Approach to Agent-Centered Context-Aware Computing in Ad Hoc Wireless Environments," (extended version) *Software Engineering for Large-Scale Multi-Agent Systems: Research Issues and Practical Applications*, A. Garcia et al. (editors), Lecture Notes in Computer Science 2603, April 2003, pp. 94-109.

GRANTS AND CONTRACTS

<u>Project Title</u>	<u>Source</u>	<u>Grant Total</u>	<u>My Share</u>
SGER: Enabling Truly Pervasive Computing: Communications Meets Software Engineering (9/2006—8/2008), sole PI	NSF	\$200,000	\$200,000
Computer Science Study Group (4/2006—12/2006), sole PI	DARPA	\$87,328	\$87,328
Context-Aware Data-Driven Communication for Mobile Applications (6/2006—7/2006), sole PI	UT-SRA	\$22,678	\$22,678
Cooperative Communication and Architectures for Cross-Layer Coordination (6/2006—12/2006), co-PI (with Scott Nettles, PI)	DARPA	\$118,401	\$61,329
ACLI-Ware: Dynamic Data Driven Control For Wireless Implemented Application Systems (7/2006—6/2008), PI (with Sriram Vishwanath, co-PI)	NSF	\$75,000	\$37,500

Adaptive Application-Centered Communication in Mobile and Pervasive Computing (9/2006—8/2009), sole PI	NSF	\$239,999	\$239,999
Educating a Competitive, Cyberinfrastructure Savvy Engineering and Construction Workforce (9/2006—8/2008), co-PI (with William J. O'Brien, PI and Kathy Schmidt, co-PI)	NSF	\$250,000	\$102,728
Adaptive Coordination for Dynamic Mobile Systems (Young Investigator Award) (1/2007—12/2009), sole PI	AFOSR	\$366,201	\$366,201
Middleware Abstractions for Network-Centric Communication (3/2007—2/2008), sole PI	DARPA	\$472,977	\$472,977
MPC Reference Solutions Lab (3/2007), sole PI	Freescale	\$25,000	\$25,000
Mobile, Distributed and Pervasive Computing Research Test Bed (6/2007—6/2008), PI (with Sriram Vishwanath, co-PI)	AFOSR	\$380,250	\$190,125
Cross-Layer Architectures for Delay-Tolerant Networks (9/2007—12/2010), PI (with Sanjay Shakkottai and Sriram Vishwanath, co-PI)	DoD	\$791,186	\$263,729
CI-TEAM Implementation: Educating a Competitive, Cyberinfrastructure Savvy Engineering Construction Workforce (5/2008—4/2010), co-PI (with William J. O'Brien, PI, Kathy Schmidt, co-PI, and Randolph Bias, co-PI)	NSF	\$1 million	\$166,563
CAREER: Opportunistic Middleware for Delay-Tolerant Networks (6/2009—5/2014), sole PI	NSF	\$400,000	\$400,000
Computer Science Study Group: Network-Centric Capture, Storage, and Distribution in Sensor Networks (3/2009—11/2009), sole PI	AFOSR	\$114,377	\$114,377
Computer Science Study Group: Network-Centric Capture, Storage, and Distribution in Sensor Networks (matching grant) (4/2009—3/2010), sole PI	DARPA	\$114,377	\$114,377
Cross-Layer Architectures for Delay-Tolerant Networks (Phase 2) (1/2011—12/2012), PI (with Sanjay Shakkottai and Sriram Vishwanath, co-PI)	DoD	\$249,377	\$83,186
NeTS: Small: Grapevine: Efficient Shared Situational Awareness for Dynamic Networks (10/2012—9/2016), sole PI	NSF	\$390,000	\$390,000
Gander: Mobile, Pervasive Search of the Here and Now in the Here and Now (8/2012), sole PI	Google	\$43,956	\$43,956
Systems Directions for Adaptive Communication in Delay-Tolerant Networks (9/2012 – 10/2015), PI (with Sanjay Shakkottai and Sriram Vishwanath, co-PI)	DoD	\$578,301	\$463,251
CPS: Synergy: Physically-Informed Assertions for CPS Development and Debugging, PI (with Sarfraz Khurshid, co-PI, Miryung Kim, co-PI, and Raul Longoria, co-PI) (9/2013—8/2017)	NSF	\$891,804	\$222,181

Building People-Centric Social Networks in Grapevine (11/2013-11/2014)	Samsung	\$95,129	\$95,129
Total		\$6,433,364	\$4,162,614

SCHOLARLY PRESENTATIONS

Date	Presentation
5/17/2015	<i>Verification and Validation in Cyber Physical Systems: Research Challenges and a Way Forward</i> International Workshop on Software Engineering for Smart Cyber-Physical Systems, Florence Italy
5/16/2015	<i>The Grapevine Context Processor: Application Support for Efficient Context Sharing</i> ACM International Conference on Mobile Software Engineering and Systems, Florence, Italy
3/26/2015	<i>Cyber-Physical Systems and Pervasive Computing: Overlap or Divergent?</i> Percom Invited Panel, Saint Louis, MO
1/8/2014	<i>The Impact of New Environments</i> Engineering Complex Software Systems: Challenges, Solutions, and Outlook, Luxembourg, Luxembourg
12/13/2012	<i>Rethinking Context for Pervasive Computing: Adaptive Shared Perspectives</i> ISPAN Keynote, San Marcos, TX
6/8/2012	<i>BRACE: An Assertion Framework for Debugging Cyber-Physical Systems</i> ICSE NIER, Zurich, Switzerland
9/22/2011	<i>Research in Mobile and Pervasive Computing</i> Invited Talk at the University of Trento, Italy
6/8/2011	<i>The Context of Coordinating Groups in Dynamic Mobile Environments</i> COORDINATION, Reykjavik, Iceland
5/22/2011	<i>Keynote: Predictability of Software Driven Sensor Networks</i> ICSE Workshop on Software Engineering for Sensor Network Applications
5/22/2011	<i>Satisfying Multiple Stakeholders: Quality of Service in the Internet of Things</i> ICSE Workshop on Software Engineering for Sensor Network Applications
5/26/2009	<i>Network-Centric Capture, Storage, and Distribution in Sensor Networks</i> AFOSR Systems and Software Workshop, Arlington, VA
2/18/2009	<i>Context and Communication Fidelity in Dynamic Systems</i> AFOSR Complex Networks Workshop, Arlington, VA
6/15/2008	<i>ROCC: A Communication Overlay Abstraction for Wireless Users</i> CDS, Beijing, China
1/24/2008	<i>Adaptive Coordination of Dynamic Mobile Systems</i> AFOSR Complex Networks Workshop, Arlington, VA
12/14/2006	<i>Enabling Programmable Pervasive Computing Environments</i> Duke University, invited talk
12/5/2006	<i>Adaptive Preference Specifications for Application Sessions</i> ICSOC, Chicago, IL

- 10/11/2006 *Cross-Layer Discovery and Routing in Reconfigurable Wireless Networks*
MASS, Vancouver, Canada
- 6/15/2006 *Enabling Ubiquitous Coordination Using Application Sessions*
Coordination, Bologna, Italy
- 4/13/2006 *Ubiquitous Computing Middleware: Application Sessions for Dynamic Environments*
EDGE, The University of Texas at Austin
- 10/16/2005 *A Dynamic Programming Framework for Pervasive Computing Environments*
Pervasive@OOPSLA, San Diego, CA
- 10/8/2004 *Context-Aware Middleware for Mobile Ubiquitous Computing*
Grace Hopper Celebration of Women in Computing, invited panel, Chicago, IL
- 5/24/2004 *Context-Sensitive Access Control for Open Multi-Agent Systems*
SELMAS, Edinburgh, Scotland
- 2/26/2004 *Adaptive Coordination in Ad Hoc Networks*
Coordination, Pisa, Italy
- 9/2/2003 *Reasoning about Context-Awareness in the Presence of Mobility*
FOCLASA, Marseille, France
- 4/1/2003 *Context-Awareness and Coordination in Mobile Environments*
ONR-MURI Grant Review, Philadelphia, PA
- 11/20/2002 *Egocentric Context-Aware Programming in Ad Hoc Mobile Environments*
FSE, Charleston, SC
- 5/23/2002 *Network Abstractions for Context-Aware Mobile Computing*
ICSE, Orlando, FL

M.S. SUPERVISIONS COMPLETED

Name	Year	Thesis Title
Michel, Jonas	2012	<i>The Gander Search Engine for Personalized Networked Spaces</i>
Grim, Evan	2012	<i>Grapevine: Efficient Situational Awareness in Pervasive Computing Environments</i>
Enderle, Justin	2011	<i>A Routing Architecture for Delay Tolerant Networks</i>
Petz, Agoston	2008	<i>An Adaptive Middleware to Support Delay Tolerant Networking</i>
Baba, Varun	2007	<i>Impact of Mobility Model on Delay Tolerant Network Simulations</i>
Holloway, Seth	2007	<i>Sliverware: A Framework for Developing Collaborative Applications</i>
Rajamani, Vasanth	2007	<i>Query Domains: Grouping Heterogeneous Sensors Based on Proximity</i>
Srinivasan, Raghavan	2007	<i>A Passive Metric Suite for Mobile Ad-Hoc Networks</i>
Pridgen, Adam	2007	<i>A Security Based Mobile Agent System</i>
Venkataraman, Meenakshi	2006	<i>Cross-Layer Discovery and Routing in Mobile Ad Hoc Networks</i>
Stovall, Drew	2005	<i>Application Session Framework for Context-Aware Computing</i>

PH.D. SUPERVISIONS COMPLETED

Name	Year	Dissertation Title
Zheng, Xi	2015	<i>Physically Informed Assertions for Cyber-Physical Systems Debugging</i>
Michel, Jonas	2015	<i>Gander: Mobile, Pervasive Search of the Here and Now in the Here and Now</i>
Petz, Agoston	2012	<i>Context-Based Adaptation in Delay-Tolerant Networks</i> First Employment: HomeAway
Holloway, Seth	2011	<i>Simplifying the Development of Intelligent Environments</i> First Employment: Convio Current Employment: Salesforce
Rajamani, Vasanth	2010	<i>Understanding Query Quality in Dynamic Environments</i> First Employment: Oracle
Jun, Taesoo	2010	<i>Chameleon: Rapid Deployment of Adaptive Communication-Aware Applications</i> First Employment: Samsung
Stovall, Drew	2009	<i>Easing Software Development for Pervasive Computing Environments</i> First Employment: The University of Texas at Austin, Postdoctoral Researcher
Kabadayi, Sanem	2008	<i>Enabling Programmable Ubiquitous Computing Environments: The DAIS Middleware</i> First Employment: Istanbul Technical University, Assistant Professor

PH.D. SUPERVISIONS IN PROGRESS

A. Students past the qualifying exam

Name	Dissertation Title (Working)
Cho, Sungmin	<i>Low-Overhead Context Sharing on Mobile Devices</i>

B. Students preparing for the qualifying exam

Kalbarczyk, Tomasz
Liu, Chenguang
McArdle, Kathryn (on leave)
Wendt, Nathaniel

POSTDOCTORAL ADVISING

Name	Dates	Graduate Institution, First Employment
Santa Cruz, Pedro	2013-2015	<i>Rice University, May 2013</i> First Employment: San Jose State University (Assistant Professor)
Fok, Chien-Liang	2010-2013	<i>Washington University in Saint Louis, May 2010</i> First Employment: The University of Texas at Austin (Luis Sentis's robotics lab)

Stovall, Drew	2009-2010	<i>The University of Texas at Austin</i> , December 2009 First Employment: Big Lever (Austin, Texas)
Roy, Nirmalya	2008-2010	<i>Texas State University</i> , August 2008 First Employment: The Institute for Infocomm Research (Singapore) Current Employment: The University of Massachusetts, Baltimore County (since 2013)
Dalton, Angela	2007-2008	<i>Duke University</i> , May 2007 First Employment: The Johns Hopkins University Applied Research Laboratory (Laurel, Maryland)

ADMINISTRATIVE AND COMMITTEE SERVICE

Departmental Administrative Committees

- ECE Integrated BS/MS Program Committee Chair (2013-2014)
- ECE Faculty Recruiting Committee Chair (2013-2014 and 2014-2015)
- ECE Faculty Expectations Committee Member (2011-2012)
- ECE Curriculum Committee Member (2011-present)
- ECE Faculty Recruiting Committee Member (2011-2012)
- ECE Colloquium Committee Member (2011-2012)
- Software Engineering Graduate Area Advisor (2010-present)
- Software Engineering Graduate Coordinator (2010-present)
- Software Engineering Graduate Recruiting Chair (2008-2012)
- Software Engineering Graduate Admissions Committee (2008-present), Chair (2010-2013)
- Computer Engineering Curriculum Committee (2004-2010)
- Computer Engineering Graduate Admissions Committee (2004-2013)
- ECE Graduate Studies Committee (2004-present)
- ECE Appeals Committee (2006-present)
- ECE Department Chair Review Committee (2005-2006)

University Service

- Technology Enhanced Education Oversight Faculty Standing Committee, Chair (2014-2015)
- University of Texas Faculty Council Executive Committee (2014-2015)
- University of Texas Faculty Council (2012-present)
- Educational Policy Faculty Standing Committee, Faculty Council Appointee (2012-present)
- Faculty Council Liaison to the Undergraduate Studies Advisory Committee (2012-2014)
- Women in ECE Faculty Advisor (2010-present)
- Edison Lecture Series: Presenter (annually, 2005-present), Organizer (2010-present)
- Grace Hopper Celebration of Women in Computing: organized conference trip for graduate and undergraduate women in computing (Fall 2007, Fall 2008)
- Presenter: The University of Texas at Austin Honors Colloquium (summer program), MITE: Introduction to Engineering (summer program), Women in Engineering Program "Consider Every Option" (pre-college program), Women in Engineering Program "Graduates Linked with Undergraduates in Engineering" (faculty panel) (2005-present)

PROFESSIONAL SOCIETY MEMBERSHIPS, COMMITTEES, AND GOVERNMENTAL COMMITTEES

Professional Society Memberships

- Association for Computing Machinery (ACM) Member (2004-present)
- Institute for Electrical and Electronic Engineers (IEEE) Member (2005-present)
- ACM SIGSOFT Member (2005-present)
- IEEE Computer Society Member (2005-present)

Technical Committee Membership

- 40th International Conference on Software Engineering (ICSE) Student Conference on Software Engineering (SCORE) Co-Chair (2018)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Technical Program Committee Chair (2017)
- 31st IEEE/ACM International Conference on Automated Software Engineering (ASE), Expert Review Panel (2016)
- ACM/IFIP/USENIX Middleware Conference (Middleware), Doctoral Symposium Co-Chair (2016)
- 24th International Conference on Cooperative Information Systems (CoopIS), Program Committee Member (2016)
- International Conference on Coordination Models and Languages (Coordination), Technical Program Committee Chair (2016)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Technical Program Committee Member (2016)
- 38th International Conference on Software Engineering (ICSE), Technical Program Board Member (2016)
- ACM/IFIP/USENIX Middleware Conference (Middleware), Technical Program Committee Member (2015)
- International Conference on Coordination Models and Languages (Coordination), Technical Program Committee Member (2015)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Technical Program Committee Member (2015)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Publications Chair (2015-2016)
- International Conference on Mobile Computing, Applications, and Services (MOBICASE), General Chair (2014)
- IEEE International Conference on Distributed Computing in Sensor Networks (DCOSS), Technical Program Committee Member (2014)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Technical Program Committee Member (2014)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Workshops Chair (2014)
- International Conference on Coordination Models and Languages (Coordination), Technical Program Committee Member (2014)
- 6th Extreme Conference on Communications (ExtremeCom), Technical Program Committee Member (2014)
- Elsevier Pervasive and Mobile Computing Journal, Area Editor (2013-present)
- IEEE Transactions on Internet of Things, Steering Committee Member (2013-present)
- 36th International Conference on Software Engineering (ICSE), Technical Program Board Member (2014)
- 19th Annual International Conference on Mobile Computing and Networking (MobiCom), Publications Chair (2013)
- 5th Extreme Conference on Communications (ExtremeCom), Technical Program Committee Member (2013)
- International Conference on Coordination Models and Languages (Coordination), Technical Program Chair (2013)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Vice Program Chair (2013)
- 20th International Symposium on the Foundations of Software Engineering (FSE), Technical Program Committee Member (2012)
- 20th International Symposium on the Foundations of Software Engineering, New Ideas and Emergent Results Track, Technical Program Committee Member (2012)
- International Conference on Coordination Models and Languages (Coordination), Technical Program Committee Member (2012)

- 3rd International Workshop on Software Engineering for Sensor Network Applications (SESENA), Technical Program Committee Member (2012)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Technical Program Committee Member (2012)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), PhD Forum Program Committee Member (2012)
- 4th Extreme Conference on Communications (ExtremeCom), Technical Program Committee Member (2012)
- International ICST Conference on Mobile and Ubiquitous Systems (Mobiquitous), Technical Program Committee Member (2011)
- IEEE International Conference on Pervasive Computing and Communications (PerCom), PhD Forum Organizer (2011)
- 18th ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE) Program Committee Member (2010)
- 31st International Conference on Software Engineering, Doctoral Symposium Program Committee Member (2009)
- 1st International Workshop on Cooperation in Pervasive Environments (CoPE), Program Committee Member (2009)
- 6th International Conference on Mobile Systems, Applications, and Services (MobiSys), Program Committee Member (2008)
- 34th Euromicro Conference on Software Engineering and Advanced Applications, Special Session on Software Architectures for Pervasive Systems (SAPS), Program Committee Member (2008)
- 1st International Workshop on Software Architectures and Mobility (SAM), Program Committee Member (2008)
- 14th ACM/SIGSOFT Symposium on the Foundations of Software Engineering (FSE), Poster Selection Committee Member (2006)
- Workshop on Software Engineering Challenges for Ubiquitous Computing, Program Committee Member (2006)
- International Workshop on Combining Theory and Systems Building in Pervasive Computing, Program Committee Member (2006)
- IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing, Program Committee Member (2006)

Government Panels and Reviewing

- Member of NSF Proposal Review Panels (2005-present)
- Air Force Office of Sponsored Projects Proposal Reviewer (2008-present)

HONORS AND AWARDS

- UT Regents Outstanding Teaching Award (2015)
- Lepley Teaching Award (2014-2015)
- Temple Foundation Faculty Fellowship (2010-present)
- National Science Foundation Early CAREER award (2009)
- IEEE Recognized Faculty, UT Austin IEEE Chapter (2008, student elected)
- Option III Software Engineering Program Outstanding Faculty Award (F2007, Sp2008, F2008, Sp2009, student elected)
- Air Force Office of Scientific Research Young Investigator Award (2007)
- ACM/SIGSOFT Distinguished Paper Award (2007)
- Defense Advanced Research Projects Agency Computer Science Study Group (2006-2010)
- National Science Foundation Graduate Research Fellowship (2001-2004)

TEACHING

Undergraduate

- EE 461L – Software Engineering Design Laboratory (Spring 2014, Fall 2014, Spring 2015)
- EE 360C – Algorithms (Spring 2009, Spring 2010, Spring 2011, Spring 2012, Summer 2012, Spring 2014)

- EE 312 – Introduction to Programming (Spring 2008, Fall 2010)
- EE 372N – Telecommunication Networks (Spring 2006, Spring 2007)

Graduate

- EE 382V – Middleware and Software Frameworks (Summer 2012 (Option III), Fall 2013)
- EE 382V – Mobile Computing (Fall 2005, Fall 2006, Spring 2006 (Option III), Fall 2008, Fall 2008 (Option III), Fall 2009 (Option III), Spring 2010, Fall 2010 (Option III), Spring 2012, Spring 2014 (Option III))
- EE 382V – Formal Methods in Distributed Computing (Spring 2007, Spring 2008 (Option III), Spring 2009, Spring 2009 (Option III), Spring 2011)