

# CHRISTINE JULIEN

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Department of Electrical and Computer Engineering  
The Center for Excellence in Distributed Global Environments  
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## CURRENT POSITION

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From 8/2004 **Assistant Professor**, The University of Texas at Austin

## ACADEMIC DEGREES

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- 8/2004 **D.Sc. in Computer Science**  
*Washington University, Saint Louis, MO*  
Dissertation: "Supporting Context-Aware Application Development in Ad Hoc Mobile Networks"  
Advisor: Gruiă-Catalin Roman
- 5/2003 **M.S. in Computer Science**  
*Washington University, Saint Louis, MO*
- 5/2000 **B.S. in Applied Science**  
*Washington University, Saint Louis, MO*  
*summa cum laude*  
majors: Computer Science, Biology

## PUBLICATIONS

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### Refereed Journal Publications

- (1) Payton, J., Julien, C., Roman, G.-C., and Rajamani, V., "Semantic Self-Assessment of Query Results in Dynamic Environments," *ACM Transactions on Software Engineering and Methodology*, to appear.
- (2) Rajamani, V., Kabadayı, S., and Julien, C., "An Interrelational Grouping Abstraction for Heterogeneous Sensors," *ACM Transactions on Sensor Networks*, 5, No. 3, to appear.
- (3) O'Brien, W.J., Julien, C., Kabadayı, S., Luo, X., and Hammer, J., "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*, to appear.
- (4) Julien, C., Roman, G.-C., and Huang, Q., "SICC: Source Initiated Context Construction in Mobile Ad Hoc Networks," *IEEE Transactions on Mobile Computing*, 7, No. 4, April 2008, pp. 401-415.
- (5) Kabadayı, S. and Julien, C., "Scenes: Abstracting Interaction in Immersive Sensor Networks," *Pervasive and Mobile Computing*, 3, No. 6, December 2007, pp. 635-658.
- (6) Roman, G.-C., Julien, C., and Payton, J., "Modeling Adaptive Behaviors in Context UNITY," *Theoretical Computer Science*, 376, No. 3, May 2007, pp. 185-204.
- (7) Julien, C. and Roman, G.-C., "EgoSpaces: Facilitating Rapid Development of Context-Aware Mobile Applications," *IEEE Transactions on Software Engineering*, 32, No. 5, May 2006, pp 281-298.
- (8) Julien, C., Payton, J., and Roman, G.-C., "Reasoning About Context-Awareness in the Presence of Mobility," *Electronic Notes in Theoretical Computer Science 97* (revised selected papers from FOCLASA03), July 2004, pp. 259-276.
- (9) Huang, Q., Julien, C., and Roman, G.-C., "Relying on Safe Distance to Achieve Strong Partitionable Group Membership in Ad Hoc Networks," *IEEE Transactions on Mobile Computing*, 3, No. 2, April-June 2004, pp. 192-205.

### Book Chapters

- (10) Julien, C. and Kabadayı, S., "Enabling Programmable Ubiquitous Computing Environments: A Middleware Perspective," *Advances in Ubiquitous Computing: Future Paradigms and Directions*, 2008.

- (11) Pridgen, A. and Julien, C., "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.
- (12) Julien, C. and Roman, G.-C., "Supporting Context-Aware Interaction in Dynamic Multi-Agent Systems," (invited paper), *Environments for Multiagent Systems*, D. Weyns et al (editors), Lecture Notes in Computer Science 3374, February 2005, pp. 168-189.
- (13) Julien, C., Payton, J., and Roman, G.-C., "Adaptive Access Control in Coordination-Based Mobile Agent Systems," *Software Engineering for Large-Scale Multi-Agent Systems III*, R. Choren et al (editors), Lecture Notes in Computer Science 3390, February 2005, pp 254-271.
- (14) Roman, G.-C., Julien, C., and Murphy, A. L., "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.

#### Highly Refereed Conference Publications

- (15) Rajamani, V., Julien, C., Payton, J., and Roman, G.-C., "Inquiry and Introspection for Non-Deterministic Queries in Mobile Networks," in *Proceedings of Fundamental Approaches to Software Engineering*, March 2009 (to appear).
- (16) Stovall, D. and Julien, C., "Rapid Prototyping of Routing Protocols with Evolving Tuples," in *Proceedings of the 8<sup>th</sup> International Conference on Distributed Applications and Interoperable Systems*, June 2008.
- (17) Jun, T., Dalton, A., Bodas, S., Julien, C., and Vishwanath, S., "Expressive Analytical Model for Routing Protocols in Mobile Ad Hoc Networks," in *Proceedings of the IEEE International Conference on Communications (ICC)*, May 2008.
- (18) Payton, J., Julien, C., and Roman, G.-C., "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.
- (19) Kabadayı, S., Julien, C., O'Brien, W.J., and Stovall, D., "Virtual Sensors: A Demonstration," In the *26<sup>th</sup> Annual IEEE Conference on Computer Communications (Demonstrations)*, 2007.
- (20) Kabadayı, S. and Julien, C., "A Local Data Abstraction and Communication Paradigm for Pervasive Computing," In *Proceedings of the 5<sup>th</sup> Annual IEEE International Conference on Pervasive Computing and Communications*, White Plains, NY, March 2007, pp. 57-68.
- (21) Jun, T. and Julien, C., "Automated Routing Protocol Selection in Mobile Ad Hoc Networks," In *Proceedings of the 22<sup>nd</sup> Annual ACM Symposium on Applied Computing, Mobile Computing and Applications Track*, March 2007, pp. 906-913.
- (22) Julien, C., "Adaptive Preference Specifications for Application Sessions," In *Proceedings of the 4<sup>th</sup> International Conference on Service Oriented Computing*, Lecture Notes in Computer Science, volume 4294, Chicago, IL, December 2006, pp. 78-89.
- (23) Holloway, S. and Julien, C., "Developing Collaborative Applications Using Sliverware," In *Proceedings of the 14<sup>th</sup> International Conference on Cooperative Information Systems*, Lecture Notes in Computer Science, volume 4275, Montpellier, France, November 2006, pp. 587-604.
- (24) Hammer, J., Hassan, I., Julien, C., Kabadayı, S., O'Brien, W.J., and Trujillo, J., "Dynamic Decision Support in Direct Access Sensor Networks: A Demonstration," In *Proceedings of the 3<sup>rd</sup> International Conference on Mobile Ad-Hoc and Sensor Systems (Demonstrations)*, Vancouver, Canada, October 2006.
- (25) Julien, C., and Venkataraman, M., "Cross-Layer Discovery and Routing in Reconfigurable Wireless Networks," In *Proceedings of the 3<sup>rd</sup> International Conference on Mobile Ad-Hoc and Sensor Systems*, Vancouver, Canada, October 2006.
- (26) Julien, C. and Stovall, D., "Enabling Ubiquitous Coordination Using Application Sessions," In *Proceedings of the 8<sup>th</sup> International Conference on Coordination Models and Languages*, Bologna (Italy), June 2006, pp. 130-140.
- (27) Kabadayı, S., Pridgen, A., and Julien, C., "Virtual Sensors: Abstracting Data from Physical Sensors," in *Proceedings of the 4<sup>th</sup> International Workshop on Mobile and Distributed Computing, co-located with WoWMoM'06*, Buffalo, NY, June 2006, pp. 587-592.
- (28) Hackmann, G., Julien, C., Payton, J., and Roman, G.-C., "Supporting Generalized Context Interactions," in *Software Engineering and Middleware: 4<sup>th</sup> International Workshop, Revised Selected Papers*, T. Gschwind and C. Mascolo (editors), Lecture Notes in Computer Science 3437, March 2005, pp. 91-106.

- (29) Roman, G.-G., Julien, C., and Payton, J., "A Formal Treatment of Context-Awareness," (invited paper) in *Proceedings of the 7<sup>th</sup> International Conference on Fundamental Approaches to Software Engineering*, Lecture Notes in Computer Science 2984, Barcelona (Spain), March 2004, pp. 12-16.
- (30) Julien, C. and Roman, G.-C., "Active Coordination in Ad Hoc Networks," in *Proceedings of the 6<sup>th</sup> International Conference on Coordination Models and Languages*, Pisa (Italy), February 2004, pp. 199-215.
- (31) Julien, C., and Roman, G.-C., "Egocentric Context-Aware Programming in Ad Hoc Mobile Environments," in *Proceedings of the 10<sup>th</sup> International Symposium on the Foundations of Software Engineering (FSE-10)*, Charleston, SC (USA), November 2002, pp. 21-30.
- (32) Roman, G.-C., Julien, C., and Huang, Q., "Network Abstractions for Context Aware Mobile Computing," in *Proceedings of the 24<sup>th</sup> International Conference on Software Engineering (ICSE'02)*, Orlando, FL (USA), May 2002, pp. 363-373.

#### Other Refereed Publications

- (33) Holloway, S., Stovall, D., Lara-Garduno, J., and Julien, C., "Opening Pervasive Computing to the Masses Using the SEAP Middleware," in *Proceedings of the IEEE Middleware Support for Pervasive Computing Workshop*, March 2009, to appear.
- (34) Petz, A., Enderle, J., and Julien, C., "A Framework for Evaluating DTN Mobility Models," in *Proceedings of the Workshop on Scenarios for Network Evaluation studies*, March 2009, to appear.
- (35) Dalton, A. and Julien, C., "Towards Adaptive Resource-Driven Routing," in *Proceedings of the 2009 IEEE International Conference on Pervasive Computing and Communications*, March 2009, to appear.
- (36) Petz, T. and Julien, C., "An Adaptive Middleware to Support Delay Tolerant Networking," in *Proceedings of the 7<sup>th</sup> Workshop on Adaptive Reflective Middleware*, December 2008.
- (37) Holloway, S., Stovall, D., Lara-Garduno, J. and Julien, C., "A Demonstration of Pervasive Device Integration with SEAP-Based Middleware," in *Proceedings of the 9<sup>th</sup> International Middleware Conference*, December 2008.
- (38) Holloway, S. and Julien, C., "ROCC: A Communication Overlay Abstraction for Wireless Users," in *Proceedings of the IEEE International Conference on Distributed Computing Workshops, Second International Workshop on Cooperative Distributed Systems (CDS)*, June 2008.
- (39) Holloway, S., Stovall, D., Dalton, A., and Julien, C., "So Many Sensors, So Little Data," in *Proceedings of the International Workshop on Software Architectures and Mobility* (co-located with *ICSE 2008*), May 2008.
- (40) Julien, C. and Perry, D., "Composable Context-Aware Architectural Connectors," in *Proceedings of the International Workshop on Software Architectures and Mobility* (co-located with *ICSE 2008*), May 2008.
- (41) Dalton, A., Julien, C., and Ellis, C., "Enabling Deliberate Design for Energy Management in Pervasive Systems," in *Proceedings of the Middleware Support for Pervasive Computing Workshop* (co-located with *IEEE PerCom 2008*), March 2008.
- (42) Holloway, S., Griffith, A., Dalton, A., Stovall, D., and Julien, C., "SASSI: The Sliverware Architecture for Sensor System Integration," in *Proceedings of the 5<sup>th</sup> ACM Conference on Embedded Networked Sensor Systems*, November 2007.
- (43) Rajamani, V., Kabadayi, S., and Julien, C., "Query Domains: Grouping Heterogeneous Sensors Based on Proximity," in *Proceedings of the 3<sup>rd</sup> International Workshop on Heterogeneous Multi-Hop Wireless and Mobile Networks*, October 2007.
- (44) Stovall, D. and Julien, C., "Resource Discovery with Evolving Tuples," in *Proceedings of the International Workshop on Engineering Software Services for Pervasive Environments*, September 2007, pp. 1-10.
- (45) O'Brien, W.J., Julien, C., Hammer, J., Kabadayi, S., and Luo, X. "An Architecture for Local Decision Support in Ad Hoc Sensor Networks" *Proceedings of the ASCE 2007 International Workshop on Computing in Civil Engineering*, Pittsburgh, PA, July 24-27, 2007, pp. 769-776.
- (46) Pridgen, A. and Julien, C., "A Secure Modular Mobile Agent System," in *Proceedings of the 5<sup>th</sup> International Workshop on Software Engineering for Large-Scale Multi-Agent Systems (SELMAS '06)*, co-located with *ICSE '06*, Shanghai (China), May 2006, pp. 67-74.
- (47) Srinivasan, R. and Julien, C., "Passive Network Awareness for Adaptive Mobile Applications," In *Proceedings of the 3<sup>rd</sup> International Workshop on Managing Ubiquitous Communications and Services*, Cork (Ireland), May 2006, pp. 22-31.
- (48) Julien, C., Hammer, J., and O'Brien, W.J., "A Dynamic Architecture for Lightweight Decision Support in Mobile Sensor Networks," in *Proceedings of the Workshop on Building Software for Pervasive Computing*, co-located with *OOPSLA'05*, San Diego, CA, October 2005.

- (49) Julien, C., Roman, G.-C., and Payton, J., "Context-Sensitive Access Control for Open Mobile Agent Systems," in *Proceedings of the 3<sup>rd</sup> International Workshop on Software Engineering for Large-Scale Multi-Agent Systems (SELMAS'2004)*, co-located with ICSE'04, Edinburgh, Scotland (UK), May 2004, pp. 42-48.
- (50) Payton, J., Roman, G.-C., and Julien, C., "Context Sensitive Data Structures Supporting Software Development in Ad Hoc Mobile Settings," in *Proceedings of the 3<sup>rd</sup> International Workshop on Software Engineering for Large-Scale Multi-Agent Systems (SELMAS'2004)*, co-located with ICSE'04, Edinburgh, Scotland (UK), May 2004, pp. 34-41.
- (51) Handorean, R., Payton, J., Julien C., and Roman, G.-C., "Coordination Middleware Supporting Rapid Deployment of Ad Hoc Mobile Systems", in *Proceedings of the 1<sup>st</sup> International ICDCS Workshop on Mobile Computing Middleware (MCM03)*, co-located with ICDCS'03, Providence, RI (USA), May 2003, pp. 362-368.
- (52) Roman, G.-C., Julien, C., and Murphy, A. L., "A Declarative Approach to Agent-Centered Context-Aware Computing in Ad Hoc Wireless Environments," in *the 1<sup>st</sup> International Workshop on Software Engineering for Large-Scale Multi-Agent Systems (SELMAS'2002)*, co-located with ICSE'02, Orlando, FL (USA), May 2002.
- (53) Roman, G.-C., Julien, C., and Huang, Q., "Formal Specification and Design of Mobile Systems," in *Proceedings of the 7<sup>th</sup> International Workshop on Formal Methods for Parallel Programming: Theory and Applications (FMPPTA'2002)*, Ft. Lauderdale, FL (USA), April 2002.

#### Under Review

- (54) Rajamani, V., Julien, C., Payton, J., and Roman, G.-C., "Supporting Adaptive Persistent Queries in Dynamic Environments," Technical Report TR-UTEDGE-2008-017, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2008.
- (55) Roy, N., Misra, A., Julien, C., and Das, S.K., "Efficient Quality-of-Inference (QoINF)-Aware Context Determination in Pervasive Care Environments," Technical Report TR-UTEDGE-2008-016, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2008.
- (56) Roy, N., Julien, C., and Das, S.K., "Resource-Optimized Ambiguous Context Mediation for Smart Healthcare," Technical Report TR-UTEDGE-2008-011, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2008.
- (57) Jun, T. and Julien, C., "Node Delay Analysis of Routing Protocols in Mobile Ad Hoc Networks," Technical Report TR-UTEDGE-2008-009, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2008.
- (58) Rajamani, V., Julien, C., and Payton, J., "Automated Assessment of Aggregate Query Imprecision in Dynamic Environments," Technical Report TR-UTEDGE-2008-008, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2008.
- (59) Rajamani, V. and Julien, C., "Adaptive Data Quality for Persistent Queries in Sensor Networks," Technical Report TR-UTEDGE-2008-001, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2008.

#### Technical Reports

- (60) Coffman, T., and Julien, C., "Geodesic Packet Routing over Self-Organizing Mobile Ad Hoc Virtual Coordinates," Technical Report TR-UTEDGE-2006-011, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2006.
- (61) Kabadayı, S., Julien, C., and Trujillo, J., "Virtual Sensors: Heterogeneous Aggregation in Pervasive Networks," Technical Report TR-UTEDGE-2006-009, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2006.
- (62) Kabadayı, S. and Julien, C., "DAIS: Middleware for Immersive Pervasive Computing Environments," Technical Report TR-UTEDGE-2006-000, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2006.
- (63) Banerjee, A., Julien, C., and Shmatikov, V., "Certificate Free Anonymous Routing for Mobile Ad Hoc Networks," Technical Report TR-UTEDGE-2005-005, Center for Excellence in Distributed Global Environments, The University of Texas at Austin, 2005.
- (64) Julien, C., "Supporting Context-Aware Application Development in Ad Hoc Mobile Networks," Doctoral Thesis, Technical Report WUCSE-04-36, Washington University Department of Computer Science and Engineering, St. Louis, June 2004.

(65) Julien, C., "Context-Aware Middleware Abstractions for Ad Hoc Mobile Computing," Doctoral Thesis Proposal, Washington University Department of Computer Science and Engineering, St. Louis, August 2003.

## RESEARCH SUPPORT

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- 6/2009–5/2014 "CAREER: Opportunistic Middleware for Delay-Tolerant Networks," The National Science Foundation (NSF), (\$400,000), sole PI.
- 5/2008–4/2010 "CI-TEAM Implementation: Educating a Competitive, Cyberinfrastructure Savvy Engineering and Construction Workforce," The National Science Foundation (NSF), (\$1,000,000), Co-PI (with William J. O'Brien, Randolph Bias, and Kathy Schmidt).
- 9/2007–9/2009 "Cross-Layer Architectures for Delay Tolerant Networks," The Department of Defense (DoD), (\$791,186), PI (with Sriram Vishwanath and Sanjay Shakkottai).
- 6/2007–6/2008 "Mobile, Distributed and Pervasive Computing Research Test Bed," The Air Force Office of Scientific Research (AFOSR), Defense University Research Instrumentation Program (DURIP), Equipment Grant (\$380,250), PI (with Sriram Vishwanath).
- 3/2007 "MPC Reference Solutions Lab," Freescale, Research Gift (\$25,000), sole PI.
- 3/2007–2/2008 "Middleware Abstractions for Network Centric Communication," Computer Science Study Group, Year 2, The Defense Advanced Research Projects Agency (DARPA), Research Grant (\$472,977), sole PI.
- 1/2007–12/2009 "Adaptive Coordination for Dynamic Mobile Systems," The Air Force Office of Scientific Research (AFOSR) Young Investigator Research Program Research Grant (\$366,201), sole PI.
- 9/2006–8/2008 "Educating a Competitive, Cyberinfrastructure Savvy Engineering and Construction Workforce," The National Science Foundation (NSF) Research Grant (\$250,000), co-PI (with William J. O'Brien and Kathy Schmidt).
- 9/2006–8/2009 "Adaptive Application-Centered Communication in Mobile and Pervasive Computing," The National Science Foundation (NSF) Research Grant (\$239,999), sole PI.
- 7/2006–6/2008 "ACLI-ware: Dynamic Data-Driven Control for Wirelessly Implemented Application Systems," The National Science Foundation (NSF) Research Grant (\$75,000), PI (with Sriram Vishwanath).
- 6/2006–12/2006 "Cooperative Communication and Architectures for Cross-Layer Coordination," The Department of Defense (Air Force) Research Grant (\$118,401), co-PI (with Scott Nettles).
- 6/2006–7/2006 "Context-Aware Data-Driven Communication for Mobile Applications," The University of Texas at Austin, Summer Research Assignment (~\$22,678), sole PI.
- 4/2006–12/2006 "Computer Science Study Group," The Defense Advanced Research Projects Agency (DARPA), Research Grant (\$87,328), sole PI.
- 3/2006–2/2008 "SGER: Enabling Truly Pervasive Computing: Communications Meets Software Engineering," The National Science Foundation (NSF) Research Grant (\$200,000), sole PI.

## PROFESSIONAL ACTIVITIES

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### Technical Committees

- 31<sup>st</sup> International Conference on Software Engineering, Doctoral Symposium Program Committee Member, 2009
- 1<sup>st</sup> International Workshop on Cooperation in Pervasive Environments (CoPE) Program Committee Member, 2009
- 6<sup>th</sup> International Conference on Mobile Systems, Applications, and Services (MobiSys) Program Committee Member, 2008
- 34<sup>th</sup> Euromicro Conference, Software Engineering and Advanced Applications, Special Session on Software Architectures for Pervasive Systems (SAPS), Program Committee Member, 2008.
- 1<sup>st</sup> International Workshop on Software Architectures and Mobility (SAM; ICSE Worksop) Program Committee Member, 2008
- ACM SIGSOFT/FSE Poster Selection Committee, 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
- IEEE International Workshop on Middleware for Mobile Ad Hoc and Sensor Networks, Program Committee Member, 2006
- Journal of Computer Systems Science and Engineering (CSSE): Special Issue on Software Engineering for Multi-Agent Systems, Evaluation Committee Member, 2005

#### **Reviewer**

- IEEE Transactions on Software Engineering
- ACM Transactions on Software Engineering and Methodology
- IEEE Transactions on Mobile Computing
- Elsevier Pervasive and Mobile Computing Journal
- IEEE Pervasive
- IEEE Internet Computing
- Computer Journal, Special Issue on Ubiquitous Computing, 2007
- IEEE Transactions on Parallel and Distributed Systems
- Elsevier Journal of Systems and Software
- IEEE Workshop on Mobile and Distributed Computing (MDC), 2006
- ETAPS Conference on the Foundations of Software Science and Computation Structures (FOSSACS), 2006
- Theoretic Computer Science, Special Issue of Revised Selected Papers of FASE, 2006
- IEEE Computer
- International Conference on Software Engineering (ICSE), 2005

#### **Panels**

- University of Texas Graduate School Panel on “What it’s Really Like Being an Assistant Professor” Professional Development and Community Engagement, UT, 2007, Austin, TX, USA
- *Understanding, Managing, and Securing Ubiquitous Computing Environments* Grace Hopper Celebration of Women in Computing, 2004, Chicago, IL, USA
- *The Seven Dwarves Go to Graduate School* (panel on the graduate school experience) Grace Hopper Celebration of Women in Computing, 2004, Chicago, IL, USA

#### **Professional Membership**

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

#### **Department/University Service**

- UT Austin Honors Colloquium summer program presenter (Summer 2008)
- MITE: Introduction to Engineering summer program presenter (Summer 2008)
- Grace Hopper Celebration of Women in Computing Trip—organized conference trip to promote women in computing (accompanied 4 ECE students (Fall 2007), 7 students (Fall 2008))
- Women in ECE Luncheon (Spring 2006)
- ECE Appeals Committee (2006-present)
- ECE Technology Steering Committee (2006-present)
- ECE Department Chair Review Committee (2005-2006)
- Edison Lecture Series Presenter (2005, 2006, 2008, 2009)
- Software Development Tech Area Night Presentation (Spring 2005, Spring 2006)
- Women in Engineering Faculty Committee: Graduate Students Reception (October 2005)
- WEP CEO (“Consider Every Option”) Pre-college program (June 2005)
- WEP GLUE (“Graduates Linked with Undergraduates in Engineering”) faculty panel (Spring 2005)
- CE Curriculum Committee (2004-present)
- CE Curriculum: Programming Sequence Subcommittee (2004-present)
- CE Graduate Admissions Committee (2004-present)
- CE Graduate Studies Committee (2004-present)

#### **Other Service**

- NSF Proposal Review Panels (2005, 2006, 2007)

## HONORS

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2009	NSF Early CAREER Award
2008	IEEE Recognized Faculty, UT Austin IEEE Chapter, Student Elected Award
2007, 2008	Option III Software Engineering Program Outstanding Faculty Award (student voted)
2007	ACM/SIGSOFT Distinguished Paper Award (FSE 2007)
2007	Air Force Office of Scientific Research Young Investigator Award
2006-2008	Computer Science Study Group (DARPA)
2001-2004	National Science Foundation Graduate Research Fellowship

## TEACHING

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Spring 2009	“Algorithms,” The University of Texas at Austin Introductory undergraduate course in algorithms, part of the existing UT ECE undergraduate curriculum, this course covers both theoretical aspects of algorithms and their design and the practical implementation of them through programming assignments. (S09: 42 students)
Spring 2008	“Introduction to Programming,” The University of Texas at Austin Introductory programming course; required for all ECE undergraduates. (S08: 125 students)
Spring 2007, 2006	“Telecommunication Networks,” The University of Texas at Austin Introductory course in computer networks, part of the existing UT ECE undergraduate curriculum. (S07: 29 students, S06: 36 students)
Spring 2009, 2007, 2005	“Formal Methods in Distributed Computing,” The University of Texas at Austin I developed and taught this graduate course that covers models for reasoning about distributed systems. (S09: 16 students, S07: 7 students, S05: 8 students)
Fall 2008, 2006, 2005, 2004	“Mobile Computing,” The University of Texas at Austin I developed and taught this graduate course that examines software engineering concerns in light of emerging mobile networks. The course is founded on current mobile computing research and focuses on evaluating research papers and a substantial research-level term project. (F08: 8 students, F06: 22 students, F05: 19 students, F04: 18 students)
8/2003-12/2003	“Distributed System Design: Models and Languages,” Washington University in St. Louis Supervisor: Dr. Gruia-Catalin Roman I developed and presented a series of lectures on formal models for mobile computing.
1/2001-5/2001	“Graduate Seminar in Distributed System Design,” Washington University in St. Louis Oversaw the selection of papers for seminar and organized the course agenda, materials, and website.
8/1999-5/2000	“Object-Oriented Software Development Laboratory,” Washington University in St. Louis Supervisor: Dr. Christopher Gill Conducted weekly lab sections, gave instruction in programming tools and techniques, provided individual tutoring, and graded assignments.

## STUDENTS

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<b>Post-Doctoral Researchers</b>	Nirmalya Roy (September 2008-present) (Ph.D., University of Texas, Arlington, 2008)	
	Angela Dalton (May 2007-August 2008) (Ph.D., Duke University, 2007)	<i>First Employment after MPC:</i> Johns Hopkins Applied Research Labs
<b>PhD Graduates</b>	Sanem Kabadayı (May 2008)	“Enabling Programmable Ubiquitous Computing Environments: The DAIS Middleware” <i>First Employment after MPC:</i> Istanbul Technical University
<b>Current PhD Students</b>		
Past Qualifying Exam	Taesoo Jun, Vasanth Rajamani, Andrew (Drew) Stovall	
Completed MS	Seth Holloway, Agoston (Tony) Petz,	

**MS Graduates**

Agoston (Tony) Petz (2008, EE)

“An Adaptive Middleware to Support Delay Tolerant Networking”

Varun Baba (2007, EE),

“Impact of Mobility Model on Delay Tolerant Network Simulations”

Seth Holloway (2007, EE),

“Sliverware: A Framework for Developing Collaborative Applications”

Vasanth Rajamani (2007, EE),

“Query Domains: Grouping Heterogeneous Sensors Based on Proximity”

Raghavan Srinivasan (2007, EE),

“A Passive Metric Suite for Mobile Ad-hoc Networks”

Adam Pridgen (2007, EE),

“A Security Based Mobile Agent System”

Meenakshi Venkataraman (2006, EE),

“Cross-Layer Discovery and Routing in Mobile Ad Hoc Networks”

Drew Stovall (2005, ESE),

“Application Session Framework for Context-Aware Computing”

**Current MS Students**

Justin Enderle