# **CHRISTINE JULIEN**

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### **EDUCATIONAL BACKGROUND**

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	Computer Science and Biology	B.S.	May 2000

#### **ACADEMIC POSITIONS**

University	Position	Years
Virginia Tech University	Department Head of Computer Science	2024-Present
Virginia Tech University	Professor	2024-Present
The University of Texas at Austin	Associate Dean for Broadening Participation	2024
The University of Texas at Austin	Associate Dean for Diversity, Equity, and Inclusion	2019-2023
The University of Texas at Austin	Professor	2016-2024
The University of Texas at Austin	Associate Professor	2010-2016
The University of Texas at Austin	Assistant Professor	2004-2010
Washington University in Saint Louis	Graduate Research Assistant	2000-2004

### PROFESSIONAL EXPERIENCES

### DEPARTMENT HEAD, COMPUTER SCIENCE, VIRGINIA TECH UNIVERSITY (2014-PRESENT)

(Professor)

- Lead a department of more than 80 faculty and 2,700+ undergraduate and graduate students at a top public research university.
- Advance graduate education, e.g., codified an approach to funding Ph.D. students and supporting timely degree completion.
- Strengthen undergraduate programs and support student-centered undergraduate advising, e.g., improved the structure and consistency of capstone experiences.
- Oversee the hiring of new faculty, including five tenure-track and three instructional-track colleagues, to expand and diversify the department's academic expertise.
- Expand alumni and industry engagement to align research partnerships and curricular programs with student and faculty needs.
- Continue research in software engineering for pervasive computing, focusing on decentralized learning in resource-constrained environments and broadening computer science education pathways to elementary school.
- Supervised the completion of four Ph.D. students (degrees conferred at UT Austin) and establish new interdisciplinary research collaborations in computing and engineering education.

#### ASSOCIATE DEAN FOR BROADENING PARTICIPATION IN ENGINEERING, COCKRELL SCHOOL OF ENGINEERING (2023-2024)

(Associate Dean for Diversity, Equity, and Inclusion, 2019-2023)

- Launched the first office of Diversity, Equity, and Inclusion in the Cockrell School.
- Shepherded the office through the transition from DEI programs to programs focused on Broadening Participation in Engineering.
- Developed and maintained the Cockrell School's DEI Plan (2019-2023), BPE Plan (2023-2024) and established the annual Cockrell School DEI Annual Report (2020-2022) to track and communicate progress.
- Created the Cockrell School's Broadening Participation in Engineering plan to strategically guide efforts to recruit and retain diverse undergraduate and graduate students.
- Led the formation of the \$1.2M NSF-funded Center for Equity in Engineering, establishing partnerships with engineering programs in minority-serving institutions in Texas.

- Unified and expanded the Cockrell School's programs for K-12 students with an intentional outreach focus starting with rising 8<sup>th</sup> graders.
- Broadened first-year mentoring groups to graduate students in all seven engineering departments.
- Developed resources for performing equitable faculty searches and mentored search committees through three search seasons.
- Collaborated with the office of the Vice Provost for Faculty Diversity, Equity, and Inclusivity to improve faculty search committee processes.
- Established a program to support faculty to integrate broadening participation activities with sponsored research projects.

#### PROFESSOR, CHANDRA DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING (2016-2024)

(Associate Professor, 2010-2016; Assistant Professor, 2004-2010)

- Taught undergraduate and graduate courses in software engineering and related areas; received the UT Regents Outstanding Teaching Award (2015) as well as other teaching awards.
- Conducted research in software engineering for mobile computing; contributed to more than \$11M in external research funding and published more than 175 archived journal and conference papers.
- Redefined the PhD Forum experience within the pervasive computing research community's flagship conference to provide more intentional research mentoring to international graduate students.
- Supervised the completion of 13 Ph.D. students and more than 15 M.S. theses.
- Led the creation of the Electrical and Computer Engineering Integrated BS/MS degree and served as the director of the program for 8 years.
- Chaired the UT-Austin Educational Policy Faculty Standing Committee for two years (2018-2020) and led the effort to recommend the replacement of the course instructor survey system; also navigated educational policy changes necessary in response to the COVID-19 pandemic.
- Served as the inaugural chair of the UT-Austin Technology Enhanced Education Oversight Faculty Standing Committee (2014-2015); addressed faculty concerns related to ownership of teaching materials and streamlined the adoption of several technology-enhanced teaching tools.
- Represented the Cockrell School of Engineering on the UT-Austin Faculty Council (2012-2014, 2016-2018) and served as a member of the Faculty Council Executive Committee (2014-2015, 2016-2017).
- Served as one of the co-leads for the application development team in the Whole Communities Whole Health research grand challenge supported by UT-Austin's Office of the Vice President for Research.
- Co-led the development team for the Protect Texas Together app used by the entire UT campus during the COVID-19 pandemic response.

### **HONORS AND AWARDS**

- ACM Distinguished Paper Award (Ubicomp) (2025)
- Mark Weiser Best Paper Award Runner Up (PerCom) (2025)
- Annis & Jack Bowen Professorship in Engineering (2017-2024)
- Jack and Maxine Zarrow Family K-16 Teaching Innovation Award (AY 2019-2020)
- Lockheed Martin Aeronautics Company Award for Excellence in Engineering Teaching (2018)
- ELATE Leadership Development Program Fellow (AY 2017-2018)
- Mark Weiser Best Paper Award (PerCom) (2016)
- UT Regents Outstanding Teaching Award (2015)
- Lepley Teaching Award (AY 2014-2015)
- Temple Foundation Faculty Fellowship (2010-2017)
- 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)

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

- 1. K. Radhakrishnan, C. R. Im, J.L. Brooks, G.C. Fallon, A. Rangel, <u>C. Julien</u>, M. O'Hair, H. Liang, and J. Lowe. "Sensor-controlled digital game for Native American adults in the Lumbee Tribe with hypertension self-management: study protocol for a randomized controlled trial", Trials, Vol. 26, No. 1, September 2025.
- 2. G.C. Fleming, S.A. Cobb, D. Watson, A. Boklage, M. Borrego, L. Contreras, and <u>C. Julien</u>. "Seed Grant Programs to Promote Community Transformation in Higher Education Institutions", Education Sciences, Vol. 14, No. 10, October 2024.
- 3. E. King\*, H. Yu\*, S. Lee\*, and <u>C. Julien</u>. "Sasha: creative goal-oriented reasoning in smart homes with large language models", Proceedings of the ACM on Interactive, Mobile, Wearable, and Ubiquitous Technologies (IMWUT), Vol. 8, No. 1, March 2024 (recipient of an ACM Distinguished Paper Award).
- 4. K. Radhakrishnan, <u>C. Julien</u>, M. O'Hair, R. Tunis, G. Lee\*, A. Rangel, J. Custer, T. Baranowski, P. J. Rathouz, and M. Kim. "Sensor-Controlled Digital Game for Heart Failure Self-Management: Protocol for a Randomized Controlled Trial", JMIR Research Protocols, May 2023.
- 5. D. M. Castelli and <u>C. Julien</u>, "Physical Activity Interventions to Reduce Metabolic Risk Factors to Cognitive Health", Kinesiology Review, Vol. 12, No. 1, Jan. 2023.
- 6. J. L. Herrara, H.-Y. Chen\*, J. Berrocal, J. M. Murillo, and <u>C. Julien</u>, "Context-Aware Privacy-Preserving Access Control for Mobile Computing", Pervasive and Mobile Computing, Vol. 87, Dec. 2022.
- 7. C. Fritz\*, D. Bray\*, G. Lee\*, <u>C. Julien</u>, S. Burson, D. Castelli, C. Ramsey, and J. Payton, "Project moveSMART: When Physical Education Meets Computational Thinking in Elementary Classrooms", IEEE Computer, Vol. 55, No. 11, pp. 29-39, Nov. 2022.
- 8. D. Weyns, I. Gerostathopoulos, B. Buhnova, N. Cardozo, E. Cioroaica, I. Dusparic, L. Grunske, P. Jamshidi, <u>C. Julien</u>, J. Michael, G. A. Moreno, S. Nejati, P. Pelliccione, F. Quin, G. N. Rodrigues, B. R. Schmerl, M. Vieira, T. Vogel, R. Wohlrab, "Guidelines for Artifacts to Support Industry-Relevant Research on Self-Adaptation", SIGSOFT Software Engineering Notes, Vol. 47, No. 4, pp. 18-24, Oct. 2022.
- 9. D. M. Castelli, S. Burson, <u>C. Julien</u>, Connor Fritz\*, and Jamie Payton, "Computer Science & Physical Activity in Elementary Schools: MoveSmart Initial Efficacy", Medicine & Science in Sports and Exercise, Vol. 54, No. 9S, Sept. 2022.
- 10. K. Radhakrishnan, <u>C. Julien</u>, T. Baranowski, M. O'Hair, G. Lee\*, A. S. De Main, C. Allen, B. Viswanathan, E. Thomaz, and M. Kim, "Feasibility of a Sensor-Controlled Digital Game for Heart Failure Self-Management: Randomized Controlled Trial", JMIR Serious Games, Vol. 9, No. 4, Dec. 2021.
- 11. Y. Jung, S. Burson, <u>C. Julien</u>, D. Bray\*, D. M. Castelli, "Development of a School-Based Physical Activity Intervention Using an Integrated Approach: Project SMART," Frontiers of Psychology: Health Psychology, Vol. 12, Aug. 2021.
- 12. C. Wu, H. Fritz, S. Bastami, J. P. Maestre, E. Thomaz, <u>C. Julien</u>, D. M. Castelli, K. de Barbaro, S. K. Bearman, G. M. Harari, R. C. Craddock, K. A. Kinney, S. D. Gosling, D. M. Schnyer, Z. Nagy, "Multi-modal data collection for measuring health, behavior, and living environment of large-scale participant cohorts," GigaScience, Vol. 10, No. 6, June 2021.
- 13. J. Yang\*, M. Sherard, <u>C. Julien</u>, and M. Borrego, "Resistance and Community-Building in LGBTQ+ Engineering Students," Journal of Women and Minorities in Science and Engineering, Vol. 27, No. 4, pp. 1-33, April 2021.
- 14. J. Yang\*, M. Sherard, <u>C. Julien</u>, and M. Borrego, "LGBTQ+ in ECE: Culture and (Non)Visibility," IEEE Transactions on Education, Early Access, March 2021.
- 15. <u>C. Julien</u>, D. M. Castelli, D. Bray\*, S. Lee\*, S. Burson, and Y. Jung, "Project SMART: A Cooperative Educational Game to Increase Physical Activity in Elementary Schools," Smart Health, Vol. 19, March 2021.
- 16. L. Baresi, W. Griswold, G. A. Lewis, M. Autili, I. Malavolta, and <u>C. Julien</u>, "Trends and Challenges for Software Engineering in the Mobile Domain," IEEE Software, Vol. 38, No. 1, pp. 88-96, Jan.-Feb. 2021.

- 17. K. Radhakrishnan, T. Baranowski, <u>C. Julien</u>, E. Thomaz, and M. Kim, "Role of Digital Games in Self-Management of Cardiovascular Diseases: A Scoping Review," Games for Health Journal, Vol. 8, No. 2, pp. 65-73, April 2019.
- 18. C. Becker, <u>C. Julien</u>, P. Lalanda, and F. Zambonelli, "Pervasive computing middleware: current trends and emerging challenges," CCF Transactions on Pervasive Computing and Interaction, Vol. 1, No. 1, pp. 10-23, Jan. 2019
- 19. N. Wendt\* and <u>C. Julien</u>, "Paco: A System-Level Abstraction for On-Loading Contextual Data to Mobile Devices," IEEE Transactions on Mobile Computing, Vol. 17, No. 9, pp. 2127-2140, Sept. 2018.
- 20. X. Zheng\*, <u>C. Julien</u>, R. Podorozhny, F. Cassez and T. Rakotoarivelo, "Efficient and Scalable Runtime Monitoring for Cyber-Physical System," IEEE Systems Journal, Vol. 12, No. 2, pp. 1667-1678, June 2018.
- 21. X. Zheng\*, <u>C. Julien</u>, M. Kim, and S. Khurshid, "Perceptions on the State of the Art in Verification and Validation in Cyber Physical Systems," IEEE Systems Journal, Vol. 11, No. 4, pp. 2614-2627, Dec. 2017.
- 22. X. Zheng\*, <u>C. Julien</u>, H. Chen, R. Podorozhny, and F. Cassez, "Real-Time Simulation Support for Runtime Verification of Cyber-Physical Systems," ACM Transactions on Embedded Computing Systems, Vol. 16, No. 4, May 2017.
- 23. N. Roy\*, A. Misra, S. K. Das, and <u>C. Julien</u>, "Determining Quality- and Energy-Aware Multiple Contexts in Pervasive Computing Environments," IEEE/ACM Transactions on Networking, Vol. 24, No. 5, pp 3026-3042, Oct. 2016.
- 24. N. Roy\*, <u>C. Julien</u>, A. Misra, S. K. Das, "Quality and Context Aware Smart Healthcare," IEEE Systems, Man, and Cybernetics Magazine, pp. 15-25, April 2016.
- 25. J. Michel\*, <u>C. Julien</u>, and J. 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, Oct. 2014.
- 26. <u>C. Julien</u>, J. Payton, "Engaging the Masses in Pervasive Computing: A Missed Opportunity?" IEEE Internet Computing, Vol. 16, No. 5, pp. 74-77, October 2012.
- 27. J. Payton, <u>C. Julien</u>, V. Rajamani\*, and G.-C. Roman, "Using Snapshot Query Fidelity to Adapt Continuous Query Execution," Pervasive and Mobile Computing, Vol. 8, No. 3, pp. 317-330, June 2012.
- 28. N. Roy\*, S. K. Das, and <u>C. Julien</u>, "Resource-Optimized Quality-Assured Ambiguous Context Mediation Framework in Pervasive Environments," IEEE Transactions on Mobile Computing, Vol. 11, No. 2, pp. 218-229, Feb. 2012.
- 29. X. Luo, W. J. O'Brien, and <u>C. Julien</u>, "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.
- 30. J. Payton, <u>Christine Julien</u>, 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.
- 31. W. J. O'Brien, <u>C. Julien</u>, S. Kabadayı\*, X. Luo, and J. 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.
- 32. V. Rajamani\*, S. Kabadayı\*, and <u>C. Julien</u>, "An Interrelational Grouping Abstraction for Heterogeneous Sensors," ACM Transactions on Sensor Networks, Vol. 5, No. 3, Article 27, May 2009.
- 33. <u>C. Julien</u>, G.-C. Roman, and Q. 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.
- 34. S. Kabadayı\* and <u>C. Julien</u>, "Scenes: Abstracting Interaction in Immersive Sensor Networks," Pervasive and Mobile Computing, Vol. 3, No., 6, pp. 635-658, Dec. 2007.
- 35. G.-C. Roman, <u>C. Julien</u>, and J. Payton, "Modeling Adaptive Behaviors in Context UNITY," Theoretical Computer Science, Vol. 376, No. 3, pp. 185-204, May 2007.

- 36. <u>C. Julien</u> and G.-C. Roman, "EgoSpaces: Facilitating Rapid Development of Context-Aware Mobile Applications," IEEE Transactions on Software Engineering, Vol. 32, No. 5, pp. 281-298, May 2006.
- 37. <u>C. Julien</u>, J. Payton, and G.-C. Roman, "Reasoning about Context-Awareness in the Presence of Mobility", Electronic Notes in Theoretical Computer Science, Vol. 97, pp. 259-276, July 2004.
- 38. Q. Huang, <u>C. Julien</u>, and G.-C. 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**

- 39. G. Lee\* and <u>C. Julien</u>. "Game Connect: A Middleware that Flexibly Connects Games to their Health Goals", in Proceedings of the 2025 IEEE/ACM Conference on Connected Health: Applications, Systems, and Engineering Technologies (CHASE), June 2025.
- 40. E. King\*, H. Yu\*, S. Vartak\*, J. Jacob\*, S. Lee, <u>C. Julien</u>. "Teaching Things to Think: Bootstrapping Local Reasoning for Smart(er) Devices", in Proceedings of the 23rd IEEE International Conference on Pervasive Computing and Communications (PerCom), March 2024 (Mark Weiser Best Paper Award Runner Up).
- 41. H. Yu\*, H.-Y. Chen\*, S. Lee\*, S. Vishwanath, X. Zheng, and <u>C. Julien</u>. "iDOL: Incentivized Decentralized Opportunistic Learning", in Proceedings of the 21st IEEE International Conference on Mobile Ad Hoc and Smart Systems (MASS), September 2024.
- 42. S. Lee\*, H. Yu\*, X. Zheng, and <u>C. Julien</u>. "Overmind: Fast and Scalable Decentralized Learning Simulation for Mobile Environments", in Proceedings of the 21st IEEE International Conference on Mobile Ad Hoc and Smart Systems (MASS), September 2024 (Best Paper Award).
- 43. J.L. Herrera, J. Berrocal, and <u>C. Julien</u>, H.-Y. Chen\*. "Enabling Automated Service Orchestration in a Computing Continuum with User-Owned Devices", in Proceedings of the IEEE International Conference on Software Services Engineering, July 2024.
- 44. G. C. Fleming, <u>C. Julien</u>, and K. E. Fernandez. "The Impact of Engineering Summer Camp Counseling on Students' Community Cultural Wealth and Engineering Identities", in the 2024 ASEE Conference and Exposition, June 2024.
- 45. J.L. Herrera, H.-Y. Chen\*, J. Berrocal, J.M. Murillo, and <u>C. Julien</u>. "Context-Aware Service Delegation for Opportunistic Pervasive Computing", in Proceedings of the International Conference on Service-Oriented Computing, Nov. 2023.
- 46. R. Tunis, T. Baranowski, A. Rangel, J. Custer, E. Thomaz, P. Rathouz, J. Bartroff, <u>C. Julien</u>, G. Lee\*, M. O'Hair, and K. Radhakrishnan. "A Decentralized Clinical Trial of a Digital Intervention with Multiple Health Trackers for Heart Failure: Early Learnings and Practical Considerations," in Proceedings of the 17<sup>th</sup> EAI International Conference on Pervasive Computing Technologies for Healthcare, Nov. 2023.
- 47. H.-Y. Chen\*, E. King\*, and <u>C. Julien</u>. "NoD: Lightweight Continuous Neighbor Discovery on Everyday Devices," in Proceedings of the 20<sup>th</sup> EAI International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services, Nov. 2023.
- 48. H. Hunter, J. Payton, and <u>C. Julien</u>. "Expanding Elementary School Computer Science Education with an Introduction to Machine Learning Through Rhythmic Studies," in Proceedings of the 8<sup>th</sup> National Workshop for REU Research in Networking and Systems, Oct. 2023.
- 49. S. Lee\*, X. Zheng, J. Hua\*, H. Yu\*, and <u>C. Julien</u>. "Dynamic Model Reduction for Decentralized Learning in Heterogeneous Mobile Networks," in Proceedings of the 19<sup>th</sup> International Conference on Mobile Ad Hoc and Smart Systems, Sept. 2023.
- 50. E. King\* and <u>C. Julien</u>, "CANDor: Continuous Adaptive Neighbor Discovery", in Proceedings of the 19<sup>th</sup> International Conference on Mobile Ad Hoc and Smart Systems, Sept. 2023.
- 51. G.C. Fleming, K.E. Fernandez, <u>C. Julien</u>, and M. Mastronardi, "Evaluation of Summer Camp Recruitment Methods and Campers' Perceptions of Engineering", in the 2023 ASEE Annual Conference and Exposition, June 2023.

- 52. N.K. Telang. R.S. Annaluru\*, <u>C. Julien</u>, and P.E. Santacruz, "Learning the Impact of Diversity, Equity, and Inclusion Modules in an Undergraduate Electrical Engineering Classroom", in the 2023 ASEE Annual Conference and Exposition, June 2023.
- 53. R. S. Annaluru\*, <u>C. Julien</u>, and J. Payton, "Linking Learning Fundamental Reinforcement Learning Concepts with Being Physically Active", in Proceedings of the 54<sup>th</sup> ACM Technical Symposium on Computer Science Education, March 2023.
- 54. H. Jeong, J. Payton, <u>C. Julien</u>, and D. M. Castelli, "Integrating Computer Science and Physical Education in Elementary Schools with Data Science Learning Modules Using Wearable Microcontrollers", in Proceedings of the 19<sup>th</sup> International Conference on Mobile Ad Hoc and Smart Systems, Oct. 2022.
- 55. K. Radhakrishnan, C. Julien, M. O'Hair, G. Lee\*, A. S. DeMain, K. Leggio, E. Hebért Arsers and T. Baranowski, "A Sensor-Controlled Digital Game for Heart Failure Self-Care Based on Behavioral Change Frameworks", in Proceedings of the IEEE International Conference on Serious Games and Applications for Health, July 2022.
- 56. K. A. Kinney, J. P. Maestre, D. Jarma, D. M. Castelli, Z. Nagy, <u>C. Julien</u>, D. Schnyer, M. Miller, F. Champagne, H. Fritz, "Whole Communities-Whole Health: A Holistic Study of Families and Home Environments (extended abstract)", in Proceedings of the 17<sup>th</sup> International Conference on Indoor Air Quality and Climate, June 2022.
- 57. J. Hua\*, H. Yu\*, S. Lee\*, H. Md Adal, C. Milhaupt, G.-C. Roman, <u>C. Julien</u>, "CoPI: Enabling probabilistic conflict prediction in smart space through context-awareness", in Proceedings of the 7<sup>th</sup> ACM/IEEE Conference on Internet of Things Design and Implementation, May 2022.
- 58. S. Lee\*, H. Yu\*, X. Zheng, and <u>C. Julien</u>, "Swarm: Playground for Large-scale Decentralized Learning Simulations", in Proceedings of the IEEE International Conference on Pervasive Computing and Communications, March 2022.
- 59. H. Yu\*, H.-Y. Chen\*, S. Lee\*, X. Zheng, and <u>C. Julien</u>, "Prototyping Opportunistic Learning in Resource Constrained Mobile Devices", in Proceedings of the First Workshop on Pervasive and Resource-Constrained Artificial Intelligence, March 2022.
- 60. G. Lee\* and <u>C. Julien</u>, "GamifyHealth: A Generic Software Framework for Health Behavioral Change", in Proceedings of the 15<sup>th</sup> EAI International Conference on Pervasive Computing Technologies for Healthcare, Dec. 2021.
- 61. H. Yu\*, J. Hua\*, and <u>C. Julien</u>, "Dataset: Analysis of IFTTT Recipes to Study How Humans Use Internet-of-Things (IoT) Devices", in Proceedings of the 4<sup>th</sup> Workshop on Data Acquisition to Analysis, Dec. 2021.
- 62. C. Fritz\*, S. Burson, S. Lee\*, <u>C. Julien</u>, D. M. Castelli, J. Payton, and C. Ramsey, "Project moveSMART: Integrating Physical Activity and Computer Science Learning in Elementary School Classrooms", in CSforALL and SageFox Consulting Group (Eds.), The intersection of RPPs and BPC in CS education: A culmination of papers from the RPPforCS Community, Dec. 2021.
- 63. H. Md Adal, C. Milhaupt, J. Hua\*, <u>C. Julien</u>, and G.-C. Roman, "The Space Broker: A Middleware for Mediating Interactions in Smart IoT Spaces", in Proceedings of the ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation, Dec. 2021.
- 64. J. L. Herrera, H.-Y. Chen\*, J. Berrocal, J. M. Murillo, and <u>C. Julien</u>, "Privacy-Aware and Context-Sensitive Access Control for Opportunistic Data Sharing", in Proceedings of the 2<sup>nd</sup> Workshop on Secure IoT, Edge, and Cloud Systems, May 2021.
- 65. S. Lee\*, X. Zheng, J. Hua\*, H. Vikalo, and <u>C. Julien</u>, "Opportunistic Federated Learning: An Exploration of Egocentric Collaboration for Pervasive Computing Applications", in Proceedings of the 19<sup>th</sup> IEEE International Conference on Pervasive Computing and Communications, March 2021.
- 66. J. Hua\*, S. Lee\*, G.-C. Roman, and <u>C. Julien</u>, "ArcloT: Enabling Intuitive Device Control in the Internet of Things through Augmented Reality", in Proceedings of the International Workshop on Mobile and Pervasive Internet of Things, March 2021.

- 67. K. Radhakrishnan, <u>C. Julien</u>, M. O'Hair, T. Baranowski, G. Lee\*, A. Sagna, C. A. Fournier, E. Thomaz, and M. T. Kim, "Sensor-controlled Digital Game May Improve Weight Monitoring Among Older Adults with Heart Failure (Poster Abstract)", in American Heart Association Scientific Sessions, Nov. 2020.
- 68. J. L. Herrera, J. Berrocal, J. M. Murillo, H.-Y. Chen\*, and <u>C. Julien</u>, "A Privacy-Aware Architecture to Share Device-to-Device Contextual Information", in Proceedings of the 6<sup>th</sup> IEEE International Conference on Smart Computing, Sept. 2020.
- 69. K. Radhakrishnan, <u>C. Julien</u>, M. O'Hair, C. Fournier, G. Lee\*, A. Sagna, T. Baranowski, M. T. Kim, "Perspectives of older adults with heart failure on a sensor-controlled digital game prototype," in the Aging and Health Informatics Conference, Dec. 2019.
- 70. J. Shenoy\*, A. Tyagi\*, M. Halabe\*, and <u>C. Julien</u>. "Jive: Spatially-Constrained Encryption Key Sharing using Visible Light Communication," in Proceedings of the 16th EAI International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services, Nov. 2019.
- 71. T. Kalbarczyk\*, C. Liu\*, J. Hua\*, and <u>C. Julien</u>. "LAD: Learning Access Control Polices and Detecting Access Anomalies in Smart Environments," in Proceedings of the 16th International Conference on Mobile Ad-hoc and Smart Systems, Nov. 2019.
- 72. J. Hua\*, C. Liu\*, T. Kalbaczyk\*, C. Wright, G.-C. Roman, and <u>C. Julien</u>. "rIoT: Enabling Seamless Context-Aware Automation in the Internet of Things," in Proceedings of the 16th International Conference on Mobile Adhoc and Smart Systems, Nov. 2019.
- 73. C. Liu\*, J. Hua\*, T. Kalbarczyk\*, S. Lee\*, and <u>C. Julien</u>. "Dataset: User side acquisition of People-Centric Sensing in the Internet-of-Things," Proceedings of the 2nd Workshop on Data Acquisition to Analysis, Nov. 2019.
- 74. K. Radhakrishnan, <u>C. Julien</u>, G. Lee\*, T. Baranowski, M. O'Hair, C. A. Fournier, A. Sagna, E. Thomaz, and M. T. Kim, "Usability Assessment of a Sensor Controlled Digital Game for Older Adults with Heart Failure (Poster Abstract)", in Gerontological Society of America 2019 Annual Conference, Nov. 2019.
- 75. J. Shenoy\*, A. Tyagi\*, M. Halabe\*, and <u>C. Julien</u>. "Demo: A Practical Application of Visible Light Communication: Opportunistic Sharing of Encryption Keys," Proceedings of the 25<sup>th</sup> Annual International Conference on Mobile Computing and Networking, Oct. 2019.
- 76. Y. Saputra\*, J. Hua\*, N. Wendt\*, <u>C. Julien</u>, G.-C. Roman. "Warble: Programming Abstraction for Personalizing Interactions in the Internet of Things," Proceedings of the 6<sup>th</sup> IEEE/ACM International Conference on Mobile Software Engineering and Systems, May 2019.
- 77. C. Maxfield\*, <u>C. Julien</u>, and M. Tiwari. "Improving Child Health through Technology-Supported Active Transport: A Survey of Parent Perspectives," Proceedings of 13<sup>th</sup> EAI International Conference on Pervasive Computing Technologies for Healthcare, May 2019.
- 78. S. Lee\*, T. Kalbarczyk\*, <u>C. Julien</u>. "REMINISCE: Transparent and Contextually-Relevant Retrospection," Proceedings of the IEEE 17th International Conference on Pervasive Computing and Communications Workshops, March 2019.
- 79. C. Liu\*, J. Hua\*, C. Hu, <u>C. Julien</u>. "Stacon: Self-Stabilizing Context Neighborhood for Mobile IoT Devices," Proceedings of the IEEE 17th International Conference on Pervasive Computing and Communications Workshops, March, 2019.
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### **OP EDS**

- 195. <u>Christine Julien</u> and Bo Begole (2025, September 26) Al isn't killing computer science jobs. It's making them more relevant, Richmond Times Dispatch, Retrieved from https://richmond.com/opinion/column/article\_eb3c0d02-c5a8-46aa-be64-6e98ac155799.html
- 196. <u>Christine Julien</u> (2023, April 1) DEI: What it is and why it matters in engineering, Dallas Morning News, Retrieved from https://www.dallasnews.com/opinion/commentary/2023/04/01/dei-what-it-is-and-why-it-matters-in-engineering/
- 197. <u>Christine Julien</u> (2021, December 2) Whole Communities Whole Health Goes Mobile, Whole Communities Whole Health, Retrieved from https://medium.com/whole-communities-whole-health/whole-communities-whole-health-cohort-study-goes-mobile-76c90c162996
- 198. <u>Christine Julien</u> (2021, August 9) Ensuring Privacy, One Data Point at a Time, Whole Communities Whole Health, Retrieved from https://medium.com/whole-communities-whole-health/ensuring-privacy-one-data-point-at-a-time-efa3d382d23b
- 199. <u>Christine Julien</u>, Ayelet Haimson Lushkov, Johanna Hartelius, and Aliza Norwood (2021, January 1) Opinion: Dr. Jill Biden Earned the Title and the Right to Determine Her Identity, Austin Chronicle, Retrieved from https://www.austinchronicle.com/columns/2021-01-01/opinion-dr-jill-biden-earned-the-title-and-the-right-to-determine-her-identity/

- 200. <u>Christine Julien</u> (2020, August 28) Alanis Morissette's Amazing Performance, CNN Opinion, Retrieved from https://www.cnn.com/2020/08/28/opinions/morissette-2020-julien/index.html.
- 201. <u>Christine Julien</u> (2020, May 19) Contact-tracing apps for COVID-19: What you need to know (and do), Yahoo News, Retrieved from https://news.yahoo.com/contacttracing-apps-for-covid-19-what-you-need-to-know-and-do-090057070.html
- 202. <u>Christine Julien</u> (2020, May 6) Kids and digital literacy: Why it's time to do more than play defense, Thrive Global, Retrieved from https://thriveglobal.com/stories/kids-and-digital-literacy-why-its-time-to-do-more-than-play-defense/

## **GRANTS, CONTRACTS, AND GIFTS**

My research has been funded by a variety of sources, including the National Science Foundation (NSF), Toyota, Tektronix, the Army Futures Command (AFC), the National Institutes for Health (NIH), Samsung, the Department of Defense (DoD), Google, the Defense Advanced Research Projects Agency (DARPA), the Air Force Office of Scientific Research (AFOSR), and Freescale. Over the course of my career, my research has brought, in total \$12,027,211, and my "share" of this funding has been \$6,484,519. The projects are below.

- G1. [Toyota] Hybrid Decentralized Learning Simulations, PI, 1/2024 12/2024, \$70,000
- G2. [WNCG] Distributed Learning on Resource Constrained Devices, gift via the WNCG Industrial Affiliates Program, PI, 9/2023 8/2024, \$6,000.
- G3. [Tektronix] Al.ML Cell Exploring Opportunistic Collaboration Among Base Stations and End Units, Pl, 7/2022 6/2023, \$60,000 (via WNCG Industrial Affiliates Program).
- G4. [NSF] Center: Track 4: Learning to Serve: A Center for Equity in Engineering at an Emerging MSI, co-PI (with Roger Bonnecaze, PI), 9/2022 8/2024, \$1,193,572.
- G5. [NIH] A sensor-controlled digital game-based approach to improve self-care behaviors among adults diagnosed with hypertension in a Native American community, Senior Personnel (with Kavita Radhakrishnan, PI), 5/2022 4/2026, \$691,344.
- G6. [NIH] Sensor-controlled digital game for heart failure self-management behavior adherence: A randomized controlled trial, Senior Personnel (with Kavita Radhakrishnan, PI), 12/2021 11/2025, \$736,178.
- G7. [NSF] CS4All: Collaborative Research: An Equity-Focused Approach to Integrating Physical Activity and CS Education for K-8 Learners, PI (with Darla Castelli, co-PI), 9/2020 8/2022, \$254,998.
- G8. [AFC] Distributed Learning Under Privacy and Resource Constraints, co-PI (with Andreas Gerstlauer, co-PI and Haris Vikalo, PI), 10/2019 2/2022, \$480,000.
- G9. [AFC] OMNI (Automated Pace), PI, 10/2019 2/2022, \$480,000.
- G10. [NSF] CNS Core: Small: Collaborative Research: Context-Assisted Interactions in the Internet of Things, PI, 10/2019-9/2022, \$299,981.
- G11. [NIH] A pilot sensor-controlled digital gaming intervention with real-time behavior tracking to motivate self-management behaviors in older adults with heart failure, Senior Personnel (with Kavita Radhakrishnan, PI), 2018 7/2020, \$427,850.
- G12. [NSF] SaTC: CORE: Small: Collaborative: CPS ACTS: Orchestrating CPS with Action Blocks, PI, 10/2018 9/2020, \$80,948.
- G13. [NSF] CSR: Medium: Extensible Distributed Systems Solutions for Community Supported Child-Independent Mobility, PI (with Mohit Tiwari, co-PI), 9/2017 8/2021, \$399,999.
- G14. [Samsung] Building People-Centric Social Networks in Grapevine, PI, 11/2013 11/2014, \$95,129.
- G15. [NSF] 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 8/2018, \$891,804.
- G16. [DoD] Systems Directions for Adaptive Communication in Delay-Tolerant Networks, PI (with Sanjay Shakkottai and Sriram Vishwanath, co-PI), 9/2012 10/2015, \$578,301.
- G17. [Google] Gander: Mobile, Pervasive Search of the Here and Now in the Here and Now, PI, 8/2012, \$43,956.

- G18. [NSF] NeTS: Small: Grapevine: Efficient Shared Situational Awareness for Dynamic Networks, PI, 10/2012 9/2016, \$390,000.
- G19. [DoD] Cross-Layer Architectures for Delay-Tolerant Networks (Phase 2), PI (with Sanjay Shakkottai and Sriram Vishwanath, co-PI), 1/2011 12/2012, \$249,377.
- G20. [DARPA] Computer Science Study Group: Network-Centric Capture, Storage, and Distribution in Sensor Networks (matching grant), PI, 4/2009 3 /2010, \$114,377.
- G21. [AFOSR] Computer Science Study Group: Network-Centric Capture, Storage, and Distribution in Sensor Networks, Pl, 4/2009 3/2010, \$114,377.
- G22. [NSF] CAREER: Opportunistic Middleware for Delay-Tolerant Networks, Pl, 6/2009 5/2014, \$400,000.
- G23. [NSF] CI-TEAM Implementation: Educating a Competitive, Cyberinfrastructure Savvy Engineering Construction Workforce, co-PI (with William J. O'Brien, PI, Kathy Schmidt, co-PI, and Randolph Bias, co-PI), 5/2008 4/2010, \$1,000,000.
- G24. [DoD] Cross-Layer Architectures for Delay-Tolerant Networks, PI (with Sanjay Shakkottai and Sriram Vishwanath, co-PI), 9/2007 12/2010, \$791,186.
- G25. [AFOSR] Mobile, Distributed and Pervasive Computing Research Test Bed, PI (with Sriram Vishwanath, co-PI), 6/2007 6/2008, \$380,250.
- G26. [Freescale] MPC Reference Solutions Lab, PI, 3/2007, \$25,000.
- G27. [DARPA] Middleware Abstractions for Network-Centric Communication, PI, 3/2007 2/2008, \$472,977.
- G28. [AFOSR] Adaptive Coordination for Dynamic Mobile Systems (YIP Award), PI, 1/2007 12/2009, \$366,201.
- G29. [NSF] Educating a Competitive, Cyberinfrastructure Savvy Engineering and Construction Workforce, co-PI (with William J. O'Brien, PI and Kathy Schmidt, co-PI), 9/2006 8/2008, \$250,000.
- G30. [NSF] Adaptive Application-Centered Communication in Mobile and Pervasive Computing, PI, 9/2006 8/2009, \$239,999.
- G31. [NSF] ACLI-Ware: Dynamic Data Driven Control for Wireless Implemented Application Systems, PI (with Sriram Vishwanath, co-PI), 7/2006 6/2008, \$75,000.
- G32. [DARPA] Cooperative Communication and Architectures for Cross-Layer Coordination, co-PI (with Scott Nettles, PI), 6/2006 12/2006, \$118,401.
- G33. [UT] Context-Aware Data-Driven Communication for Mobile Applications, PI, 6/2006 7/2006, \$87,328.
- G34. [DARPA] Computer Science Study Group, PI, 4/2006 12/2006, \$22,678.
- G35. [NSF] SGER: Enabling Truly Pervasive Computing: Communications Meets Software Engineering, PI, 9/2006 8/2008, \$200,000.

#### SUPERVISED STUDENTS

- S1. [Ph.D. 2025, UT Austin] Hsiao-Yuan Chen. Continuous Neighbor Discovery on Commodity Devices with Practical Consideration.
- S2. [Ph.D. 2025, UT Austin] Haoxiang Yu. Enhanced Collaboration In between the Machine Learning Models: Bringing Decentralized Learning to Reality. First Employment: Meta.
- S3. [Ph.D. 2025, UT Austin] Grace Lee. Integrating Sensor Data and Gamification for Health Behavior Change.
- S4. [Ph.D. 2024, UT Austin] Evan King. Continuous Discovery and Goal-Oriented Control of SmartDevices in Mobile Environments. First Employment: Useful Sensors.
- S5. [Ph.D. 2023, UT Austin] Sangsu Lee. *Towards opportunistic collaborative learning in mobile environments*. First Employment: Google.
- S6. [Ph.D. 2022, UT Austin] Jie Hua. Facilitate interactions with devices in the Internet of Things (IoT) with context-awareness. First employment: Meta.
- S7. [M.S. 2022, UT Austin] Connor Fritz. Integrating computing through physical activity in elementary school classrooms. First employment: Medical student at UTHealth Houston.

- S8. [M.S. 2022, UT Austin] Jessica Pham. Developing the Whole Communities Whole Health app known as Hornsense: An experience report. First employment: Atlassian.
- S9. [Ph.D. 2020, UT Austin] Chenguang Liu. Facilitate collaboration in Internet of Things (IoT) proximity networks. First employment: Google.
- S10. [Ph.D. 2019, UT Austin] Tomasz Kalbarczyk. A framework for device-to-device communication between mobile devices using heterogeneous channels. First employment: Symmetry Systems.
- S11. [M.S. 2019, UT Austin] Yosef Saputra. *User-driven programming abstraction approach for Internet of Things*. First employment: Cisco.
- S12. [M.S. 2018, UT Austin] Ahsen Dinç. Adaptive learning approaches for smart home environments with a simulator implementation. First employment: Google.
- S13. [M.S. 2018, UT Austin] Colin Maxfield. Can technology be leveraged to improve child independent mobility? First employment: Rocket Software. Current employment: Pendo.io.
- S14. [Ph.D. 2016, UT Austin] Sungmin (Samuel) Cho. *Navigating tradeoffs in context sharing among the Internet of Things.* First employment: Northern Kentucky University (Assistant Professor).
- S15. [Ph.D. 2015, UT Austin] Xi Zheng. *Physically informed assertions for cyber-physical systems debugging.* First employment: Deakin University (Lecturer Assistant Professor equivalent); Current employment: Macquarie University (Senior Lecturer Associate Professor equivalent).
- S16. [Ph.D. 2015, UT Austin] Jonas Michel. *Gander: mobile, pervasive search of the here and now in the here and now.* First employment: CognitiveScale; Current employment: Gala.
- S17. [Ph.D. 2012, UT Austin] Agoston Petz. Context-based adaptation in delay-tolerant networks. First employment: HomeAway; Current employment: Salesforce.
- S18. [M.S. 2012, UT Austin] Evan Grim. *Grapevine: efficient situational awareness in pervasive computing environments.* First employment: Toopher; Current employment: Salesforce.
- S19. [Ph.D. 2011, UT Austin] Seth Holloway. *Simplifying the development of intelligent environments*. First employment: Convio; Current employment: Salesforce.
- S20. [M.S. 2011, UT Austin] Justin Enderle. A routing architecture for delay-tolerant networks. First employment: Sandia National Laboratories.
- S21. [Ph.D. 2010, UT Austin] Vasanth Rajamani. *Understanding query quality in dynamic environments*. First employment: Oracle; Current employment: LinkedIn.
- S22. [Ph.D. 2010, UT Austin] Taesoo Jun. *Chameleon: rapid deployment of adaptive communication-aware applications.* First employment: Samsung.
- S23. [Ph.D. 2009, UT Austin] Drew Stovall. *Easing software development for pervasive computing environments.* First employment: Big Lever.
- S24. [Ph.D. 2008, UT Austin] Sanem Kabadayi. Enabling programmable ubiquitous computing environments: the DAIS middleware. First employment: Istanbul Technical University (Assistant Professor)
- S25. [M.S. 2007, UT Austin] Varun Baba. *Impact of mobility model on delay tolerant network simulations*. First employment: IBM; Current employment: Accenture.
- S26. [M.S. 2007, UT Austin] Raghavan Srinivasan. *A passive metric suite for mobile ad-hoc networks*. First employment: Cisco; Current employment: Amazon.
- S27. [M.S. 2007, UT Austin] Adam Pridgen. A security-based mobile agent system. First employment: Foundstone; Current employment: Amazon.
- S28. [M.S. 2006, UT Austin] Meenakshi Venkataraman. *Cross-layer discovery and routing in mobile ad hoc networks*. First employment: Spirent; Current employment: NVIDIA.

### **CURRENT STUDENTS**

- S29. [Virginia Tech] Ali El-Sayed
- S30. [Virginia Tech] Thomas Deverin (co-advised with Sally Hamouda)

## POSTDOCTORAL SUPERVISIONS

- D1. Pedro Santacruz (2013-2015), UT Austin. First employment: San Jose State University (Assistant Professor). Current employment: The University of Texas at Austin (Assistant Professor of Practice)
- D2. Chien-Liang Fok (2010-2013), UT Austin. First employment: Toyota Research Institute.
- D3. Drew Stovall (2009-2010), UT Austin. First employment: Big Lever.
- D4. Nirmalya Roy (2008-2010), UT Austin. First employment: The Institute for Infocomm Research, Singapore. Current employment: The University of Maryland, Baltimore County (Associate Professor)
- D5. Angela Dalton (2007-2008), UT Austin. First employment: The Johns Hopkins University Applied Research Laboratory. Current Employment: AMD.

#### INVITED PRESENTATIONS

- P1. Teaching Spaces to Think: Language, Vision, and the Future of Smart Environments. Distinguished Lecture Series at Texas A&M University, College Station, Texas, USA (September 2025).
- P2. Opportunistic collaborative learning in pervasive computing applications. Keynote presentation at the International Conference on Intelligent Environments, Biarritz, France (June 2022).
- P3. From continuous neighbor discovery to contact tracing: Practical Considerations. Invited talk at Texas State University (July 2020), Missouri University of Science and Technology (Sept. 2020), and Boise State University (Oct. 2020).
- P4. MobileSoft 2020: Current and future challenges in mobile software engineering. Invited panel presentation, virtual (July 2020).
- P5. Device-to-device collaboration in support of community health. Invited presentation at the Jornadas de Ciencia e Ingeniería de Servicios, co-located with the Conference of the Software Engineering and Software Development Technologies Society (SISTEDES), Cáceres, Spain (September 2019).
- P6. A balancing act: carving a space for intentional research in mobile software engineering. Keynote presentation at the International Conference on Mobile Software Engineering and Systems, Montreal, Canada (May 2019).
- P7. Enabling smarter communities through opportunistic clouds. Invited talk at the University of Trento, Trento, Italy (May 2019)
- P8. Opportunistic crowds: a place for device-to-device collaboration in pervasive crowd applications. Keynote presentation at the Workshop on Context-Awareness for Multi-Device Pervasive and Mobile Computing, Kyoto, Japan (March 2019).
- P9. Technology for child independent mobility: parent perspectives. Keynote presentation at the Workshop on Human-Centered Computational Sensing, Athens, Greece (March 2018)
- P10. Paco: onloading contextual data to mobile devices. Invited talk at the Bruno Kessler Foundation, Trento, Italy (July 2017).
- P11. Middleware for context sharing in device-to-device mobile environments. Invited talk at the University of L'Aquila, L'Aquila, Italy (July 2016).
- P12. Cyber-physical systems and pervasive computing: overlap or divergent? Invited panel presentation at the International Conference on Pervasive Computing and Communications, St. Louis, USA (March 2015).
- P13. Rethinking context for pervasive computing: adaptive shared perspectives. Keynote presentation at the International Symposium on Pervasive Algorithms and Networks, San Marcos, USA (Dec. 2012).

### PROFESSIONAL SOCIETY MEMBERSHIPS AND RESEARCH SERVICE ROLES

Professional Society Memberships

- American Society for Engineering Education (2020-present)
- Association for Computing Machinery (ACM) Member (2004-present)
- Institute for Electrical and Electronic Engineers (IEEE) Member (2005-2016); Senior Member (2016-)
- ACM SIGSOFT Member (2005-present)

• IEEE Computer Society Member (2005-present)

#### Journal Editorial Positions

- Associate Editor, ACM Transactions on Cyber-Physical Systems (2021-present)
- Associate Editor, ACM Transactions on Sensor Networks (2017-present)
- IEEE Transactions on Networking, Steering Committee Member (2017-2021)
- Elsevier Pervasive and Mobile Computing Journal, Area Editor (2013-2021)
- IEEE Transactions on Internet of Things, Steering Committee Member (2013-2015)

### Technical Committee Service

- [PerCom] IEEE International Conference on Pervasive Computing and Communications
  - o General Chair (2020)
  - o Program Committee Chair (2017)
  - o Program Committee Vice Chair (2013)
  - o Artifacts Track Co-Chair (2022, 2021)
  - o PhD Forum Chair (2011), Committee Member (2012)
  - Workshops Chair (2014)
  - o Publications Co-Chair (2016, 2015)
  - Sustainability Chair (2025)
  - o Program Committee Member (2026, 2025, 2024, 2023, 2022, 2021, 2019, 2018, 2016, 2015, 2014, 2012)
- [MOBILESoft] IEEE/ACM International Conference on Mobile Software Engineering and Systems
  - Steering Committee Chair (2021-present)
  - o General Chair (2018)
  - o New Ideas and Emerging Results Co-Chair (2017)
  - o Program Committee Member (2019)
  - o Tool Demos and Mobile Apps Program Committee Member (2022)
- [Middleware] ACM/IFIP/USENIX Middleware Conference
  - o Workshops Co-Chair (2021, 2020)
  - o Doctoral Symposium Co-Chair (2016)
  - o Program Committee Co-Chair (2023)
  - o Program Committee Member (2026, 2024, 2021, 2020, 2017, 2015)
- [ICSE] IEEE/ACM International Conference on Software Engineering
  - o Co-Located Events Chair (2022)
  - o Student Conference on Software Engineering (SCORE) Co-Chair (2018)
  - o Program Committee Member (2025, 2023, 2018, 2017, 2014)
  - o Doctoral Symposium Program Committee Member (2009)
- [FSE] ACM Symposium on the Foundations of Software Engineering
  - o Program Committee Member (2024, 2022, 2021, 2012, 2010)
  - o New Ideas and Emerging Results Track Program Committee Member (2012)
  - o Poster Selection Committee Member (2006)
- [EWSN] International Conference on Embedded Wireless Systems and Networks
  - o General Co-Chair (2020)
  - o Program Committee Co-Chair (2024)
  - o Program Committee Member (2025, 2019)
- [Coordination] International Conference on Coordination Models and Languages
  - Steering Committee Member (2013-present)
  - o Program Committee Chair (2013)
  - o Program Committee Member (2015, 2014)
- Additional Program Committees:
  - o International Internet of Things Conference (2024)
  - o IEEE International Conference on Software Services Engineering (SSE) (2024)
  - o International Workshop on Equitable Data and Technology (FairWare) (2022)

- o ACM/IEEE Internet of Things Design and Implementation (2019, 2018, 2017)
- o ACM Multimedia Systems Conference, Special Session on IoT and Smart Cities (2018)
- o IEEE International Conference on Distributed Computing Systems (2018)
- o IEEE/ACM International Conference on Automated Software Engineering (2018, 2016)
- o International Workshop on Pervasive Systems Integration (2018)
- o International Conference on Computer Communications and Networks (2017)
- o ACM Symposium on Applied Computing (2017)
- o International Conference on Mobile Computing, Applications, and Services, General Chair (2014)
- o IEEE International Conference on Distributed Computing in Sensor Networks (2014)
- o Extreme Conference on Communications (2014, 2013, 2012)
- o International Conference on Mobile Computing and Networking, Publications Chair (2013)
- o International ICST Conference on Mobile and Ubiquitous Systems (2011)
- o International Workshop on Cooperation in Pervasive Environments (2009)
- o Euromicro Conference on Software Engineering and Advanced Applications (2008)
- o International Conference on Mobile Systems, Applications, and Services (2008)
- o International Workshop on Software Architectures and Mobility (2008)
- o Workshop on Software Engineering Challenges for Ubiquitous Computing (2006)
- o Workshop on Combining Theory and Systems Building in Pervasive Computing (2006)
- o International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing (2006)

### **ADMINISTRATIVE AND COMMITTEE SERVICE**

University of Texas Service

- Search Committees:
  - Assistant Dean of the Office of Diversity, Equity, and Inclusion, Dell Medical School search committee
    (2021-22)
  - o Texas Executive Engineering Education Executive Director search committee (2021-22)
  - o University Registrar search committee (2019)
- Faculty Council and Standing Committees
  - o Educational Policy Committee, Chair (2018-20), Member (2012-14, 2016-17, 2020-21)
  - o Faculty Advisory Committee on Budgets, Member (2017-20)
  - o Technology Enhance Education Oversight Committee, Chair (2014-15), Member (2017-18)
  - o Faculty Council Executive Committee (2014-15, 2016-17)
  - o Faculty Council (2012-15, 2016-18)
  - o Undergraduate Studies Advisory Committee (2012-14)
- Other University-Level Committees
  - o Bridging Disciplines Program, Smart Cities, Faculty Panel (2019-2024)
  - o Promoting Well-Being in Learning Environments, Participating Faculty (2018-2024)
  - o President's Award for Global Learning Task Force (2020-21)
  - o Quantitative Reasoning Flag Committee Chair (2018-21)
  - o Continuing & Professional Education Strategic Review & Visioning Steering Committee (2019-20)

Department Service, UT Chandra Department of Electrical and Computer Engineering

- Women in ECE, Faculty Advisor (2010-2024)
- Edison Lecture Series, Presenter (2004-present), Organizer (2010-2024)
- Graduate Studies Committee (2004-2024)
- Education Visioning Subcommittee Co-Chair (2022-23)
- Integrated BS/MS Program, Director (2014-21), Committee Chair (2013-14)
- Software Engineering Graduate Area Advisor & Coordinator (2010-20)
- Faculty Recruiting Committee, Chair (2013-14, 2014-15), Member (2011-12, 2017-18, 2018-19)
- Graduate Admissions Committee, Chair for Software Engineering (2010-13), Member (2004-20)
- Curriculum Committee Member (2011-16)