

Rong Zheng

Canada Research Chair on Mobile Computing (Tier-1)

BUSINESS ADDRESS

Room 121
Information Technology Building
1280 Main Street West
Hamilton, Ontario
Canada L8S 4K1
Tel: +1(905)525-9140 x 22891

EDUCATIONAL BACKGROUND

Degrees and Diplomas

2004 Ph.D. in Computer Science, University of Illinois, Urbana-Champaign, USA
1998 Master of Engineering (thesis) in Electrical Engr., Tsinghua University, Beijing, China
1996 Bachelor of Engineering in Electrical Engr, Tsinghua University, Beijing, China

CURRENT STATUS AT MCMASTER

2018 – present Professor, Department of Computing and Software
2021 – present Associate Member, Master School of Biomedical Engineering
2017 – present Member, McMaster Institute for Research on Aging
2013 – present Associate Member, Department of Electrical and Computer Engineering

PROFESSIONAL ORGANIZATIONS

2015 – present Professional Engineer of Ontario
2010 - present Senior Member, IEEE
2004 – present Member, ACM

EMPLOYMENT HISTORY

Academic

2018 – present Professor, Department of Computing and Software
2017 – 2021 Associate Chair of Graduate Study and Research
2016 – 2020 Principal Investigator, McMaster Computing Infrastructure Center (CIRC)
2013 – 2018 Associate Professor (tenured), Dept. of Computing and Software, McMaster University
2010 – 2012 Associate Professor (tenured), Dept. of Computer Science, University of Houston, USA
2004 – 2010 Assistant Professor (tenure-track), Dept. of Computer Science, University of Houston, USA

Other

09/20 – Director, NSERC sMAP CREATE program
09/19 – 06/20 Visiting Professor, Harbin Institute of Technology, ShenZhen, China
02/12 – 04/12 Visiting Scientist, Microsoft Research, Redmond, USA
08/11 – 01/12 Visiting Associate Professor, Hong Kong Polytechnic University, China
06/00 – 08/00 Research Intern, Bell Labs, Lucent, Holmdel, NJ

SCHOLARLY AND PROFESSIONAL ACTIVITIES

Editorial Boards

2018 - 2022 Editor, IEEE Transactions on Mobile Computing
2018 - 2019 Editor, IEEE Transactions on Network Science and Engineering

2015 - 2019 Editor, IEEE Transactions on Wireless Communications
2017 Guest Editor, IEEE Transactions on Network Science and Engineering, SI on Learning-based Management, Modeling and Control in Networking
2012 Guest Editor, Elsevier Computer Communications, SI on Cyber Physical Systems
2008 Guest Editor, EURASIP Journal on Advances in Signal Processing, SI on Wireless Location Estimation and Tracking

Steering committee

2021 – ACM SenSys

Conference/Workshop Organization

2024 Area Chair, IEEE INFOCOM
2024 General Program, IEEE Conference on Smart Mobility
2023 Program co-chair, ACM Workshop on mmWave Sensing Systems and Applications
2021 Program co-chair, ACM SenSys 2021
2021 Program co-chair, ACM Workshop on Cyber Physical Human System Design and Implementation
2020 Demo and poster co-chair, ACM MobiSys 2020
2019 Program co-chair, IEEE Smart Internet of Things 2020
2018 Workshop, Tutorial, Competition Co-Chair, CPS-IoT week 2019
2017 Technical Program Co-Chair, ACM Workshop on Mobile Crowdsensing Systems and Applications, co-located with ACM SenSys
2016 General Co-chair, IEEE IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC)
2014 Technical Program Co-Chair, ACM Workshop on MobileHealth, co-located with ACM MobiHoc
2012 Technical Program Co-Chair, IEEE International Conference on Cyber, Physical and Social Computing (CPSCoM)
2012 Technical Program Co-Chair, International Conference on Wireless Algorithms, Systems, and Applications (WASA)

External Grant & Personnel Committees

2017, 2021 Ontario Early Researcher Award
2015 – 2017 NSERC Discovery Grant Computer Science Evaluation Group
2009/10/12/14 US National Science Foundation (NSF) Panel

Journal Referee

2023 ACM Transactions on Sensor Networks
2021 ACM Transactions on Internet of Things
2006 – 2017 IEEE Transactions on Wireless Communications
2004 – 2015 IEEE Transactions on Mobile Computing
2004 – present IEEE Journal of Selected Area of Communications
2008 – 2013 ACM Transactions on Sensor Networks

External Grant Reviews

2023 Ireland Industry RD&I Fellowship
2022 Research Grants Council (Hong Kong)
2020 – 2023 Mitacs Accelerate Award
2017 Alberta Innovates Strategic Research Projects
2016, 17, 18 Technology innovation development award (TIDA), Science Foundation Ireland
2013/14 NSERC Discovery Grants
2013 NSERC Strategic Grants
2011 NSERC Collaborative Research and Development (CRD) Grants

HONOURS AND AWARDS

2022	N2Women Stars in Networking and Communication
2021 - 23	Dean's Doctoral Mentoring Honor Roll
2020 -	Canada Research Chair (Tier-1) in Mobile Computing
2019	NSERC Discover Accelerator Supplement
2019	Best paper award, IEEE International Conference on Communications (ICC)
2015 – 2018	Joseph Ip Engineering Fellow
2017	1st Place in indoor localization competition (Infrastructureless category), The 16th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN)
2015	IEEE CPSWeek best demo award
2013	IEEE WCNC best paper award
2010	University of Houston research excellence award
2009	Departmental academic accomplishment award, University of Houston
2006	US National Science Foundation CAREER Award

COURSES TAUGHT (McMaster)

Undergraduate

Computing and Software

01/2023 – 04/2023	Instructor, COMP SCI/SFWR ENG 4C03, 140 students
01/2022 – 04/2022	Instructor, COMP SCI/SFWR ENG 4C03, 183 students
01/2021 – 04/2021	Instructor, COMP SCI/SFWR ENG 4C03, 230 students
01/2019 – 04/2019	Instructor, COMP SCI/SFWR ENG 4C03, 211 students
01/2018 – 04/2018	Instructor, COMP SCI/SFWR ENG 4C03, 153 students
01/2017 – 04/2017	Instructor, COMP SCI/SFWR ENG 4C03, 183 students
01/2016 – 04/2016	Instructor, COMP SCI 3SH3, 64 students (new course)
01/2016 – 04/2016	Instructor, COMP SCI/SFWR ENG 4C03, 116 students
01/2015 – 04/2015	Instructor, COMP SCI/SFWR ENG 3SH3, 136 students
01/2015 – 04/2015	Instructor, COMP SCI/SFWR ENG 4C03, 153 students
09/2014 – 04/2015	Instructor, COMP SCI 4ZP6, 43 students
01/2014 – 04/2014	Instructor, COMP SCI/SFWR ENG 3SH3, 124 students
01/2014 – 04/2014	Instructor, SFWR_ENG 4J03, 31 students

Graduate

09/2024 – 12/2024	Co-instructor, CAS 781, 14 students
09/2023 – 12/2023	Co-instructor, CAS 781, 10 students
09/2022 – 12/2022	Co-instructor, CAS 781, 8 students
01/2022 – 04/2022	Co-instructor, CAS 781, 10 students
09/2021 – 12/2021	Co-instructor, CAS 781, 9 students
01/2021 – 04/2020	Co-instructor, CAS 781, 8 students
09/2020 – 12/2020	Co-instructor, CAS 781, 12 students
09/2018 – 12/2018	Instructor, CAS 772, 8 students
09/2017 – 12/2017	Instructor, CAS 772, 11 students
09/2015 – 12/2015	Instructor, CAS 765, 4 students
09/2013 – 12/2013	Instructor, CAS 765, 9 students

CONTRIBUTIONS TO TEACHING PRACTICE

Course/Curriculum Development

- Develop two graduate courses for the sMAP CREATE program
- Redesign COMP SCI 3SH3 into a practice and experience course with significant hand-on lab components.
- Revamp Master of Engineering programs
- Redesign graduate curriculum

SUPERVISORSHIPS

	PhD McMaster/UH*	MASc/MSc McMaster/UH	MEng McMaster	PDF McMaster/UH	Undergrad McMaster
In-progress	6/0	3/0	2	0/0	0
Completed	10/5	7/10	16	4/1	17

*UH – University of Houston

Master (Thesis)

In progress

09/2021 – Bodee Quansah, Biomedical Engineering, Open Platform for Binaural Acoustic Research
 09/2021 – Boyu Jiang, Software Engineering, mmWave-based Gesture Recognition
 09/2023 – Zimeng Zhou, Computer Science, mmWave-based Human-centric Sensing

Completed

09/2020 – 10/2022 Xijian Lou, Computer Science, Data-driven Models for 3D Joint Angle Estimation, Unity
 09/2018 – 12/2020 Shervin Manzuri, Computer Science, ConDi: Downsampling of Ambiguous Clips for Efficient Action Recognition Using Confidence Distillation (co-supervised with Fei Chiang), Data scientist, Goldspot Discoveries Corp.
 09/2017 – 04/2019 Cristian Frincu, Computer Science, “Informative Path Planning for Data Collection in Indoor Environments”, Embedded software engineer, Geotab
 09/2016 – 08/2018 Chenhe Li, Computer Science, “Design of Two-tier Wireless Sensor Networks for Data Center Monitoring”, Huawei Canada
 09/2016 – 08/2018 Jun Li, Computer Science, “Design of an Ultra-Wide Band based Indoor Positioning System”, Huawei Canada
 09/2015 – 12/2017 Mohamed Hammuda, Electrical and Computer Engineering, “Learning-Based Multi-Channel Spectrum Access in Full-duplex Cognitive Radio Networks with Unknown Primary User Activities” (co-supervision with Tim Davidson), Digital payload system architect, MDA
 09/2015 – 12/2017 Yu-Ting Wang, Electrical and Computer Engineering, “Design of an Asynchronous Acoustic System for Indoor Localization” (**Best MS thesis award, Dept. of ECE, McMaster University**), Primary Supervisory, Co-supervision with Dongmei Zhao, Current Position: Software Designer at Evertz Microsystems Ltd.
 09/2010 – 05/2013 Thanh Le, “Sequential Learning in Wireless Network Monitoring”, Primary Supervisor, Co-supervision with Dr. Zhu Han, Solution Engr., Current Position: COMIT Corp.
 09/2010 – 05/2012 Sai Shiva Kailaswar, “An Empirical Characterization of Concrete Channel and Modulation”, Current Position: Device Characterization Engineer at Micron Technology
 09/2008 – 05/2011 Pallavi Arora, “Multi-armed Bandits in Cooperative Network Monitoring”, Current Position: Software Engr. in Amazon
 09/2009 – 05/2011 Seifenlaser Hamed, “A framework for participatory sensing for location-based services”, Current Position: Software Engineer at Plunkett Research
 09/2008 - 05/2010 Song Wei, “Design and Evaluation of Multi-channel Multi-radio MAC”, Current Position: Lead Android Developer at Time Warner Inc.
 09/2007 - 05/2009 Arun Chhetri, “Monitoring Architecture for Wireless Infrastructure Networks”, Current Position: Senior Engr. Manager, Samsung Mobile
 09/2006 - 05/2008 Amit Pendharkar, “Obstacle Discovery in Distributed Active Sensor Networks”, Current Position: Imaging Geophysicist at CGGV eritas
 09/2005 - 05/2007 Vivek Aseeja, MeshMan: “A Management Framework for Wireless Mesh”, Current Position: Software Engineer at NVIDIA
 09/2004 - 05/2006 Muqsith A. Mohammad, "Wireless Localization Based on Radio Signal Strength Mapping", Current Position: Embedded Software Engineer at Intel
 09/2004 - 05/2006 Sumit Singhals, "ANDES: Anomaly detection in Wireless Sensor Networks", Current Position: N/A

Master of Engineering (Project)

In progress

Completed

09/2022 – 08/2024	Quan Yuan, Computer Science, “mmWave-based Indoor Mapping”
09/2022 – 08/2024	Yongqi Pi, Computer Science, “mmWave-based Indoor Localization”
09/2021 – 12/2022	Liang Xu, Computer Science, “Implementation of a Simulation Engine for IMU Data”
09/2020 – 12/2021	Ruizhe Zhang, Computer Science, “A Two-stage Model for Multi-camera, Multi-target Tracking”, Amazon
09/2020 – 12/2021	Nazanin Moshtagh, Computer Science, “Binaural Sound Event Classification”
09/2018 – 08/2021	Ge Chen, Computer Science, “A Calibration Platform for IMU Devices”, Localization”, Current Position: Embedded Engr., Ford Corp.
09/2019 – 12/2020	Tianyuan Zhang, Computer Science, “Cleaning IMU Data”
09/2019 – 05/2020	Jianpeng Liu, Computer Science, “Semi-supervised Learning for WiFi-based Indoor
09/2018 – 12/2019	Xiaodong Xu, Computer Science, “Automatic Synchronization of Wearable Sensors and MOCAP System for HAR Ground Truth Annotation”, Current Position: Software engr., Facebook
09/2017 – 12/2018	Hongbin Jia, Computer Science, “MacQuest Event Application Programming Interface and Augmented Reality Extension”
09/2017 – 12/2018	Marshall Wice, Software Engineering, “End-to-end Indoor Signage Detection on a Mobile Platform”
01/2017 – 08/2018	Arooj Ahmed, Computer Science, “Ischemic Stroke Detection using EEG Signals”
09/2016 – 12/2017	Chen Zhu, Computer Science, “Routing in 2-D Maps”
09/2016 – 12/2017	Zhe Gong, Computer Science, “Indoor-outdoor and floor change detection using Smartphone Sensors”
09/2014 – 04/2016	Tianwei Liu, Computer Science, “iOS App for MacQuest and Map Validation”
09/2014 – 12/2015	Zhen Cheng, Computer Science, “MacQuest Architecture and Client Design”
09/2014 – 12/2015	Wenbo Liu, Computer Science, “Assessing and Developing Video Conferencing tools for Tele-health Solutions”
09/2014 – 12/2015	Xiang Xiao, Computer Science, “Door-to-Door Route Planning in Indoor-Outdoor Pathway Network”
09/2013 – 05/2014	George Ibrahim, e-Health, “A Survey of Mobile Health and Medical Applications”

Doctoral**In progress**

09/2023 –	Margaret Xie, Computer Science, CV-based Exercise Assessment (transferred from Master’s program in Sept 2024)
09/2022 –	Yunkai Yu, Computer Science, Invariant Machine Learning Models for Human Motion Analysis
09/2022 –	Andrew Mitchell, Computer Science, Physics and Physiology Informed Human Motion Analysis (<i>transferred from MSc program in 2022</i>)
09/2021 –	Renjie Xu, Computer Science, “Computation Acceleration for Visual Scene Analysis”
09/2021 –	Longyun Liao, Computer Science, “Vision-based Human Pose Estimation”
09/2021 –	Navid Zandi, Computer Science, “Binaural Acoustic Localization and Spatialization”

Completed

05/2019 – 04/2024	Wei Zhao, Computer Science, “mmWave-based Indoor Simultaneous Localization and Mapping”
09/2018 – 08/2023	Keivan Nalaie, Computer Science, “Computation Acceleration for Multi-camera Multi-target Tracking”, postdoctoral researcher in Mayo Clinic, Minnesota
05/2018 – 08/2022	Yujiao Hao, Computer Science, “Overcoming Data Scarcity in IMU-based Human Motion Analysis”, Current Position: Researcher, Huawei, Canada
09/2017 – 08/2021	Sahar Asgari, Mechanical Engineering, “Hybrid surrogate model for pressure and temperature prediction in a data center and its application” (co-supervision with Ishwar Puri), Current Position: Methodologist, Ontario Ministry of Health
09/2017 – 05/2021	Mehdi Jafarizadeh, Computer Science, “Reliable Data Acquisition Protocol for Data Center monitoring”, Current Position: 5G Research Engineer at Shabodi
09/2017 – 05/2021	Yongyong Wei, Computer Science, “Active Learning in Mobile CrowdSensing”, Current Position: Research Engineer, SAP Canada

09/2015 – 08/2019	Yihao Fang, Computer Science, “Deep Learning Goes Mobile”, Current Position: Course coordinator, York University
09/2013 – 12/2017	Qiang Xu, Computer Science, “Design and Evaluation of Indoor Localization Techniques and Systems”, Current Position: Research Scientist, HMI labs, Huawei Canada
09/2013 – 12/2017	Ala Shaabana, Computer Science, “A Wearable System for Classifying Fine Gestures On the Extremities Level using Electromyography”, Current Position: Bittensor
09/2013 – 12/2015	Hadi Meshgi, Electrical and Computer Engineering, “Radio Resource Management in Wireless Networks with Multicast Transmissions”, (co-supervision with Dongmei Zhao as primary), Current Position: Project Engr., Crosslinx Transit Solutions
09/2009 – 05/2013	Huy Nguyen, “Learning and Inference in Graphical Structures”, Current Position: Director, Data Science, IHS Markit Inc
09/2009 – 05/2013	Nam Nguyen, “Non-parametric Bayesian Learning and Applications” Joint Supervision with Dr. Zhu Han, Current Position: Staff Data Scientist at Wayfair
09/2009 – 05/2013	Guanbo Zheng, “Robust MAC Design in 60GHz Millimeter Wave Wireless Networks”, Current Position: Sr. Engineer, Enbridge
01/2009 – 12/2012	Khuong Vu, “Variants of Voronoi Diagrams and Their Applications”, Current Position: R&D Engineer at Candence Design Systems
09/2005 – 05/2011	Soji Omiwade, “Data Recovery in Wireless Sensor Networks”, Current Position: Senior Software Engineer, Aramco Service Company

Post-Doctoral Fellowship

In progress

Completed

03/2021 – 03/2023	Bo Zhang, Research engineer, RaySecur
12/2022 – 02/2023	Wen Cai, Associate Professor, Northwestern University, China
09/2019 – 08/2021	Awany M. El-Mohandes, Senior ASIC Engineer, Ciena
05/2017 – 04/2019	Peiyong Tsai, Assistant Professor, York University (co-supervision with Ishwar Puri)
09/2006 – 12/2008	Cunqing Hua, Professor, Shanghai Jiaotong University, China

Supervisory Committees

2022 –	Zikai Dou, CAS, Supervisor: Fei Chiang
2022 –	Xin Che, CAS, Supervisor: Lingyan Chu
2022 –	Matthew Ruder, Kinesiology, Supervisor: Dylan Kobsar
2021 –	Patrick Chin, Mechanical, Supervisor: Stephen Veldhuis
2021 –	Qing Liu, CAS, Supervisor: Hassan Ashtiani
2021 –	Elizabeth Hofer, CAS, Supervisor: Hassan Ashtiani
2020 – 2022	Xiaoxuan Chu, ECE, Supervisor: Max Wong
2020 – 2022	Nima Mashayekhi, CAS, Supervisor: Hassan Ashtiani
2016 – 2020	Zheng Zheng, CAS, Supervisor: Fei Chiang
2017 – 2021	Yang Bo, Computer Science, Supervisor: Wenbo He
2017 – 2019	Morteza Mirhoseini, Computer Science, Supervisor: Doug Down
2017 – 2018	Markimba Williams, Electrical and Computer Engineering, Supervisor: Thia Kiruba
2016 – 2018	Duy Vu, Computer Science, Supervisor: Borzoo Bonakdarpour

Examiners

Internal

2022	Yangdi Lu (PhD), CAS, Supervisor: Wenbo He
2022	Huan Liu (PhD), ECE, Supervisor: Jun Chen
2022	Alireza Fathollah Pour (MAsc), CAS, Supervisor: Hassan Ashtiani
2018	Canxiu Zhang (MAsc), Electrical and Computer Engineering, Supervisor: Max Wong
2016	Salvatore D’Amore (MAsc), Computing and Software, Supervisor: Jacques Carette
2015	Hadi Meshgi (PhD), Electrical and Computer Engineering, Supervisor: Dongmei Zhao, Rong Zheng

2015 Jonathan Tong (PhD), Psychology, Supervisor:
2014 Aaron Wilson (MAsc), Computing and Software, Supervisor: M. v.Mohrenschildt

External

2019 Zimu Zheng (PhD), Hong Kong Polytechnic University, Supervisor: Dan Wang
2017 Jun Li (PhD), University of Toronto, Supervisor: Baochun Li
2017 Md Mizanur Rahman (PhD), Ryerson University, Supervisor: Jelena Mistic, Vojislav Mistic
2017 Han Li (MS), University of Melbourne, Australia, Supervisor: Jianzhong Qi
2016 Wei Wang (PhD), University of Toronto, Supervisor: Ben Liang and Baochun Li
2015 Xiaoqiang Ma (PhD), Simon Fraser University, Supervisor: Jianguan Liu
2015 Zhongming Zheng (PhD), University of Waterloo, Supervisor: Sherman Shen

Undergraduate Research Student (McMaster University)

05/2023 – 08/2023 Dalia Taylor, “A Mobile App for HRTF Self-Assessment”, NSERC USRA
05/2023 – 08/2023 Luxsa Nanthakumaran, “Digital annotations for Online Tai Chi”
05/2023 – 08/2023 Pesara Amarasekera, “Indoor mapping and localization using mmWave Radar”
05/2022 – 08/2022 Quan Yuan, “Control software for a rotating RADAR platform”
07/2022 – 10/2022 Zimeng Zhou, “mmWave-based Hand Gesture Recognition”, Mitacs Globalink
05/2022 – 07/2022 Rida Safer, “Scaping Online Tai Chi Videos”, EREA
05/2022 – 08/2022 David Chung, “Avatar for Online Tai Chi”, EREA
11/2021 – 04/2021 Adrian Sochaniwsky, “Design of a rotating RADAR platform”
05/2021 – 08/2021 Samuel Parent, “Design of an acoustic measurement platform”, EREA
05/2021 – 08/2021 Gaole Dai, “Calibration methods for 3D joint angle estimation”, Mitacs Globalink
07/2019 – 08/2019 Haiming Zhu, “Benchmarking DNN models on embedded devices”, Mitacs Globalink
05/2019 – 08/2019 William Luders, “Visualization of MoCapture data”, NSERC USRA
05/2019 – 08/2019 Sandhiya Radhaharan, “MobilityAI”, EREA
05/2019 – 08/2019 Jiamin Zhou, “MobilityAI”
01/2019 – 04/2019 Ziyi Jin, “TeamNet: A Collaborative Inference Framework on the Edge”
05/2018 – 08/2018 Daniel Rubinstein, “MacQuest Event Planning App”, EREA
05/2018 – 08/2018 Alex Lo, “MacQuest Event Planning Server”
05/2018 – 08/2018 George Zhang, “Autonomous Fault Prediction in Coaxial Cable Data Networks”, USRA
05/2017 – 08/2017 Eric Tran, “MacQuest++”, USRA
05/2017 – 08/2017 Luka Samac, “Design of a UAV for Data Center Monitoring”, USRA
05/2016 – 04/2017 Cristian Frincu, “Design of a Rover Robot for Indoor Survey”
05/2016 – 07/2016 Akhilesh Rawat, “Design of an acoustic board for indoor ranging”, Mitacs Globalink
05/2015 – 08/2015 Chenhe Li, “Comparison of Indoor Localization using WiFi fingerprints and Trilateration”
05/2015 – 07/2015 Mingzhi Yu, “A Face Recognition App for Smart Glasses”
05/2015 – 08/2015 Zhikun Luo, “A Smartphone App for Acoustic Pairwise Ranging”, Mitacs Globalink

Visiting Scholars and Students

10/2023 – 04/2023 Can Xue, Zhejiang University, China
05/2022 – 12/2022 Chuan Liu, Huazhong University of Science and Technology, China
10/2019 – 10/2020 Luchi Hua, Zhejiang University, China
09/2016 – 09/2017 Chaokun Zhang, Tsinghua University, China
09/2016 – 12/2017 Haifeng Lin, Nanjing Forestry University, China
01/2009 – 06/2009 Na Xia, Professor, Hefei University of Science and Technology, China

LIFETIME RESEARCH FUNDING (External)

1. Rong Zheng, Natalia Nikolova, Anthea Innes, Non-Contact mmWave-based Health Monitoring Systems for Memory Care, NSERC Alliance (PI), 08/2024 – 07/2027, \$665,814
2. Rong Zheng, Ian Bruce, Ewan McPherson, Toward Acoustic Virtual and Augmented Reality on Commodity

- Hardware, New Frontiers in Research Fund (Exploration) (PI), 03/2022 – 02/2025, \$250,000
3. Rong Zheng, Robust Non-contact RF Sensing for Human Vital Sign and Activity Monitoring, Mitacs Accelerate, 03/2021 – 02/2023, \$175,000
 4. Rong Zheng et al., CREATE: Smart Mobility for the Aging Populations (PI), Natural Sciences and Engineering Research Council of Canada (NSERC) (PI), 09/2020 – 08/2027, \$1,650,000
 5. Rong Zheng, Discovery: Enabling Interactive Perception Applications on Edge Devices, Natural Sciences and Engineering Research Council of Canada (NSERC), 05/2019 – 04/2025, \$330,000
 - a. NSERC Discovery Accelerator Supplement, 05/2019 – 04/2024, \$120,000
 6. Rong Zheng, iLOS: A Composable and Efficient Indoor Localization Engine, Natural Sciences and Engineering Research Council of Canada (NSERC), 10/2018 – 09/2018, \$125,000
 7. Rong Zheng, Autonomous Fault Prediction in Coaxial Cable Data Networks (DOCSIS), Natural Sciences and Engineering Research Council of Canada (NSERC), Ontario Center of Excellence VIP-I, Clearcable Networks, 05/2018 – 04/2019, \$50,000
 8. Fei Chiang, Rong Zheng, CRD: Data-Driven Platform for Multimodal Positioning and Tracking in Indoor Environments, 02/2017 – 01/2019, \$690,000
 9. Rong Zheng, Ishwar Puri, Doug Down, CRD: Autonomous Monitoring of Data Centre Operations (PI), Natural Sciences and Engineering Research Council of Canada (NSERC), Cinnos Mission Critical Incorporated, 12/2016 - 12/2021, \$1.4M
 10. Rong Zheng, Ruhai Wu, Kui Wu (UVic), SPG-P: ShareCrowd: A New Paradigm for Mobile Crowdsensing (PI), Natural Sciences and Engineering Research Council of Canada (NSERC), 10/2016 - 09/2019, \$467,000
 11. Rong Zheng, ENGAGE: Whisper: An Acoustic-based Proximity Detection System, 2015, \$25,000
 12. Rong Zheng, ENGAGE: Overcoming the Digital Divide: Assessing and Developing Video Conferencing-based Tele-health Solutions in Bandwidth-constrained Rural and Remote Areas, Natural Sciences and Engineering Research Council of Canada (NSERC), 2014, \$25,000
 13. Rong Zheng, Software-Defined Radio Enabled Wireless Surveillance and Security. Natural Sciences and Engineering Research Council of Canada (NSERC), MRI CFI-LOF, 2014, \$212,415
 14. Rong Zheng, Discovery: A Sequential Learning Framework for Resource Management in Wireless Networks, Natural Sciences and Engineering Research Council of Canada (NSERC), 05/2013 – 04/2018, \$180,000
 15. Rong Zheng, NeTS-NEDG: Toward Service Predictability under Uncertain Resource Availability in 802.11 Like Networks, US National Science Foundation (NSF), 2009 – 2011, USD \$200,000
 16. Rong Zheng, Gangbin Song, Zhi Ding, CCSS-CPS: Collaborative: If the Bridges Can Talk: Toward Autonomous Structure Health Monitoring for Civil Infrastructure (PI), US National Science Foundation (NSF), 2011 – 2013, USD \$250,000
 17. Rong Zheng, Zhu Han, Cliff Dasco, NeTS: Small: Toward Wireless Co-existence For Safety-critical Applications (PI), US National Science Foundation (NSF), 2011 – 2013, USD\$300,000
 18. Rong Zheng, CAREER: Data Dissemination in Multihop Wireless Networks: Theory and System Design, US National Science Foundation (NSF), 01/2006 – 01/2011, USD\$400,000
 19. Jaspal Subhlok, Rong Zheng, Edgar Gabriel, CSR-PSCE, SM: Collaborative Research: VOLPEX: A Framework for Parallel Execution on Volatile Nodes, US National Science Foundation (NSF), 09/2008 – 08/2010, USD\$280,000
 20. Stephen Huang, Ernst Leiss, Ioannis Kakadiaris, Yuriy Fofanov, Rong Zheng, GAANN: Doctoral Training in Computer and Computational Sciences, US Department of Education (P200A070377), 8/15/07-8/14/10, USD\$383,643
 21. Shishir Sha, Rong Zheng, Edgar Gabriel, Marc Garbey, DURIP: Smart Camera Network Instrumentation for Collaborative Mission Research, US Army Research Office, 07/2008 – 07/2009, USD\$140,000

LIFETIME PUBLICATIONS

	Book	Book Chapter	Journal	Conference
Published	1	2	64	91
Accepted			0	0

Google Scholar: citations > 8000, h-index 44

Peer Reviewed

Books

1. Rong Zheng, Cunqing Hua, "Sequential Learning and Decision Making in Wireless Resource Management", Springer, 2016

Contribution to Books

1. Rong Zheng and Cunqing Hua, "Sensor techniques and network protocols for smart grid", Cambridge University Press, 2010
2. Rong Zheng and Jennifer C. Hou, "Power Management and Power Control in Wireless Networks", Ad Hoc and Sensor Networks, Yi Pan and Yang Xiao (Eds), Nova Science Publishers, 2006

Journal Articles

1. Rodrigues, Isabel B and Ching, Priscilla and Kalra, Mayank and Zheng, Rong and Rabinovich, Alexander and Papaioannou, Alexandra and Leckie, Carolyn and Kobsar, Dylan and Fang, Qiyin and Bray, Steven and others. Exploring the perspectives of older adults who are pre-frail and frail to identify interventions to reduce sedentary behaviour and improve mobility: a thematic content analysis. BMC Public Health. 24(1): 1582, 2024
2. C. He, S. Cheng, R. Zheng and J. Liu, "Delay-and-Sum Beamforming-Based Spatial Mapping for Multisource Sound Localization," in *IEEE Internet of Things Journal*, vol. 11, no. 9, pp. 16048-16060, 1 May1, 2024
3. Y. Hao, X. Lou, B. Wang and R. Zheng, "CROMOSim: A Deep Learning-Based Cross-Modality Inertial Measurement Simulator," in *IEEE Transactions on Mobile Computing*, vol. 23, no. 1, pp. 302-312, Jan. 2024
4. El-Mohandes AM, Zandi Navid, Zheng R. DeepBSL: 3D Personalized Deep Binaural Sound Localization on Earable Devices. *IEEE Internet of Things Journal*. vol. 10, no. 21, pp. 19004-19013, 1 Nov.1, 2023
5. W. Zhao, C. Wen, Q. Yuan and R. Zheng, "Efficient Rotating Synthetic Aperture Radar Imaging via Robust Sparse Array Synthesis," in *IEEE Transactions on Geoscience and Remote Sensing*, vol. 61, pp. 1-12, 2023
3. R. Xu, S. Razavi and R. Zheng, "Edge Video Analytics: A Survey on Applications, Systems and Enabling Techniques," in *IEEE Communications Surveys & Tutorials*, vol. 25, no. 4, pp. 2951-2982, 2023,
4. Bo Zhang, Boyu Jiang, Rong Zheng, Xiaoping Zhang, Jun Li, and Qiang Xu "Pi-ViMo: Physiology-inspired Robust Vital Sign Monitoring using mmWave Radars." *ACM Transactions on Internet of Things*, Vol 4, Issue 2, 2023.
6. Chao Cai, Henglin Pu, Menglan Hu, Rong Zheng, Jun Luo, Acoustic Software Defined Platform: A Versatile Sensing and General Benchmarking Platform, *IEEE Transactions on Mobile Computing*, 22 (1), pp. 647-660, 2023
5. Gravesande, Janelle, Lisandra Almeida de Oliveira, Natasha Malik, Brenda Vrkljan, Rong Zheng, Paula M. Gardner, and Lisa C. Carlesso. "Feasibility, Usability, and Acceptability of Online Mind-Body Exercise Programs for Older Adults: A Scoping Review." *Journal of integrative and complementary medicine*, March, 2023
7. Y. Hao, B. Wang and R. Zheng, "Invariant Feature Learning for Sensor-Based Human Activity Recognition," in *IEEE Transactions on Mobile Computing*, vol. 21, no. 11, pp. 4013-4024, 2022
8. K. Niu, X. Wang, F. Zhang, R. Zheng, Z. Yao and D. Zhang, "Rethinking Doppler Effect for Accurate Velocity Estimation With Commodity WiFi Devices," in *IEEE Journal on Selected Areas in Communications*, vol. 40, no. 7, pp. 2164-2178, 2022
9. W. Zhao, J. -K. Zhang, X. -P. Zhang and R. Zheng, "Multiple-Target Localization by Millimeter-Wave Radars with Trapezoid Virtual Antenna Arrays," in *IEEE Internet of Things Journal*, vol. 9, no. 20, pp. 19589-19598, 15 Oct.15, 2022
10. Y Wei, Rong Zheng, A Reinforcement Learning Framework for Efficient Informative Sensing, *IEEE Transactions on Mobile Computing*, 21 (7), 2306 – 2317, 2022

11. Y Wei, Rong Zheng. "Efficient Wi-Fi Fingerprint Crowdsourcing for Indoor Localization." *IEEE Sensors Journal*, 22 (6), 5055-5062, 2022
12. Chao Cai, Rong Zheng, Jun Luo, Ubiquitous Acoustic Sensing on Commodity IoT Devices: A Survey, *IEEE Communications Surveys and Tutorials*, 24 (1), 432 – 454, 2022
13. Chao Cai, Chen Zhe, Jun Luo, Henglin Pu, Menglan Hu, Rong Zheng, "Boosting Chirp Signal Based Aerial Acoustic Communication under Dynamic Channel Conditions", *IEEE Transactions on Mobile Computing*, vol. 21, no. 9, pp. 3110-3121, 2022
14. M. Jafarizadeh and R. Zheng, "Optimal Design of LEMoNet for Environmental Monitoring of Data Centers," in *IEEE Transactions on Green Communications and Networking*, vol. 5, no. 4, pp. 1820-1832, Dec. 2021
15. Ruinan Jin, Chao Cai, Tianping Deng, Qingxia Li, Rong Zheng, "MotionBeep: Enabling Fitness Game for Collocated Players with Acoustic-enabled IoT Devices", *IEEE Internet of Things Journal*, vol. 8, no. 13, pp. 10755-10765, 2021
16. Sahar Asgari, Rohit Gupta, Ishwar K Puri, Rong Zheng, "A Data-driven Approach to Simultaneous Fault Detection and Diagnosis in Data Centers", *Applied Soft Computing*, Volume 110, 2021
17. Awny M El-Mohandes, Rong Zheng, "Active Matching Circuit to Enhance the Generated Power of Triboelectric Nanogenerators", *Nano Energy*, 80, Page 105588
18. Cao Cai, H Pu, M Hu, Rong Zheng, Jun Luo, SST: Software Sonic Thermometer on Acoustic-enabled IoT Devices. *IEEE Transactions on Mobile Computing*. 20 (5), 2067-2079, 2021
19. Yongyong Wei, Rong Zheng, "Informative Path Planning for Location Fingerprint Collection", *IEEE Transactions on Network Science and Engineering*, 7 (3), 2020
20. Chao Cai, Rong Zheng, Jun Li, Lingwei Zhu, Henglin Pu, Menglan Hu, "Asynchronous Acoustic Localization and Tracking for Mobile Targets", *IEEE IoT Journal*, 7 (2), 2019
21. Ala Shaabana, Joey Legere, Jun Li, Rong Zheng, Martin V Mohrenschildt, Judith M Shedden, "Portable Electromyography: A Case Study on Ballistic Finger Movement Recognition", *IEEE Sensor Journal*, 2019
22. Ala Shabaana, Rong Zheng, "CRONOS: A Post-hoc Data-Driven Multi-Sensor Synchronization Approach", *ACM Transactions on Sensor Networks*, 2019
23. Muhammad Hammuda, Rong Zheng, Tim Davidson, "Learning-theoretical Spectrum Sensing and Access in Full-duplex Cognitive Radio Network", *IEEE Transactions on Network Science and Engineering*, 2018
24. Yangli-ao Geng, Qingyong Li, Rong Zheng, Fuzhen Zhuang, Ruisi He, "RECOME: a New Density-Based Clustering Algorithm Using Relative KNN Kernel Density", *Information Sciences* 436 (2018): 13-30.
25. Muhammad Hammouda, Rong Zheng and Tim Davidson. Learning-Theoretic Multi-Channel Spectrum Sensing and Access in Full-Duplex Cognitive Radio Networks with Unknown Primary User Activities. *IEEE Transactions on Network Science and Engineering*, 2018.
26. Yangliu Dou, Yihao Fang, Rong Zheng, Chuan Hu, Fengjun Yan, A Gated Branch Neural Network for Mandatory Lane Changing Suggestion at the On-ramps of Highway. *IET Intelligent Transport Systems*, 2018
27. Mohammad Esmalifalak, Huy Nguyen, Rong Zheng, Le Xie, Lingyang Song, Zhu Han, A Stealthy Attack Against Electricity Market Using Independent Component Analysis. *IEEE Systems Journal* 12(1): 297-307, 2018
28. Hadi Meshgi, Dongmei Zhao, Rong Zheng, Optimal Resource Allocation in Multicast Device-to-Device Communications Underlying LTE Networks, *IEEE Transactions on Vehicle Technology*, 66(9): 8357-8371, 2017
29. Ala Shabana, Rong Zheng, Zhipeng Xu, "Inferring Clothing Insulation Levels using Mechanisms of Heat Transfer", *ACM Transactions on Sensor Networks*, 13(4), 2017
30. Na Xia, Yuanxiao Ou, Shiliang Wang, Rong Zheng, Hua-Zheng Du, Chaonong Xu, "Localizability Judgment in UWSNs Based on Skeleton and Rigidity Theory", *IEEE Trans. Mob. Comput.* 16(4): 980-989 (2017)
31. Cunqing Hua, Hongwei Yu, Rong Zheng, Jie Li, Rui Ni, "Online Packet Dispatching for Delay Optimal Concurrent Transmissions in Heterogeneous Multi-RAT Networks", *IEEE Transactions on Wireless Communications*, 15(7): 5076-5086 (2016)
32. Najmeh Forouzandehmehr, Zhu Han, Rong Zheng, "Stochastic Dynamic Game between Hydropower Plant and Thermal Power Plant in Smart Grid Networks". *IEEE Systems Journal* 10(1): 88-96 (2016)
33. Qiang Xu, Rong Zheng, Walid Saad and Zhu Han, "Device Fingerprinting in Wireless Networks: Challenges and Opportunities", *IEEE Communications Surveys and Tutorials*, 18(1): 94-104 (2016)
34. Guanbo Zheng, Cunqing Hua, Rong Zheng, Qixin Wang, "Toward Robust Relay Placement in 60 GHz

- mmWave Wireless Personal Area Networks with Directional Antenna”, IEEE Trans. Mob. Comput. 15(3): 762-773 (2016)
35. Esmalifalak, M.; Nguyen, H.; Zheng, R.; Xie, L.; Song, L.; Han, Z., “A Stealthy Attack Against Electricity Market Using Independent Component Analysis,” in IEEE Systems Journal 10(1): 88-96 (2015)
 36. Yunghsiang S. Han, Hung-Ta Pai, Rong Zheng, Pramod K. Varshney, “Update-Efficient Error-Correcting Product-Matrix Codes”, IEEE Transaction on Communication, 63(6): 1925 – 1938 (2015)
 37. Nam Nguyen, Rong Zheng, Jie Liu, Zhu Han, “GreenLocs: An Energy Efficient Indoor Place Identification Framework”, ACM Transactions on Sensor Networks, 11(3): 43:1-43:21 (2015)
 38. Thanh Le, Csaba Szepesvari, Rong Zheng, “Sequential Learning for Multi-channel Wireless Network Monitoring with Channel Switching Costs”, IEEE Transactions on Signal Processing, 62(22): 5919-5929 (2014)
 39. Rong Zheng, Thanh Le, Zhu Han, “Approximate Online Learning Algorithms for Optimal Monitoring in Multi-channel Wireless Networks”, IEEE Transactions on Wireless Communications, 13(2): 1023-1033 (2014)
 40. Yunghsiang S. Han, Hung-Ta Pai, Rong Zheng, Wai Ho Mow, “Efficient Exact Regenerating Codes for Byzantine Fault Tolerance in Distributed Networked Storage”, IEEE Transactions on Communications, 62(2): 385- 397 (2014)
 41. Yufei Wang, Rong Zheng, Qixin Wang, “Self-tuned Distributed Monitoring of Multi-channel Wireless Networks using Gibbs Sampler”, Computer Networks 64: 261-272 (2014)
 42. Yufei Wang, Guanbo Zheng, Qixin Wang, Rong Zheng, Qian Zhang, “WiCop: Engineering WiFi Temporal White-Spaces for Safe Operations of Wireless Personal Area Networks in Medical Applications”, IEEE Transactions on Mobile Computing, 13(5): 1145-1158 (2014)
 43. Huy Nguyen, Gabriel Scalosub, and Rong Zheng, “On Quality of Monitoring for Multi-channel Wireless Infrastructure Networks, IEEE Transactions on Mobile Computing, 13(3): 664-677 (2014)
 44. Huy Nguyen and Rong Zheng, “A Binary Independent Component Analysis Approach to Tree Topology Inference”, IEEE Transactions on Signal Processing, 61(12): 3071-3080 (2013)
 45. Huy Nguyen and Rong Zheng, “On Budgeted Influence Maximization in Social Networks”, IEEE Journal on Selected Areas in Communications, Special Issue on Network Science (JSAC NS), 31(6): 1084-1094 (2013)
 46. Huy Nguyen, G. Zheng, Z. Han, and R. Zheng, “Binary Inference for Primary User Separation in Cognitive Radio Networks”, IEEE Transactions on Wireless Communications, 12(4): 1532-1542 (2013)
 47. Yi Huang, Mohammad Esmalifalak, Huy Nguyen, Rong Zheng, Zhu Han, Husheng Li, Lingyang Song, “Bad data injection in smart grid: attack and defense mechanisms”, IEEE Communications Magazine 51(1): 27-33, (2013)
 48. Nam Nguyen, Rong Zheng, Zhu Han, “On Identifying Primary User Emulation Attacks in Cognitive Radio Systems Using Nonparametric Bayesian Classification”, IEEE Transaction on Signal Processing, 60(3): 1432-1445 (2012)
 49. Kyung-Joon Park, Rong Zheng, Xue Liu, “Cyber-physical systems: Milestones and research challenges”, Computer Communications 36(1): 1-7 (2012)
 50. Walid Saad, Zhu Han, Rong Zheng, Vincent Poor, Tamer Basar, “Coalitional Games in Partition Form for Joint Spectrum Sensing and Access in Cognitive Radio Networks”, IEEE Journal of Selected Topics in Signal Processing, 6(2): 195-209 (2012)
 51. Cunqing Hua, Rong Zheng, “Robust Topology Engineering in Multi-Radio Multi-Channel Wireless Networks”, in IEEE Transactions on Mobile Computing, 11(3): 492-503 (2012)
 52. Huy Nguyen, Rong Zheng, “Binary Independent Component Analysis with OR Mixtures”, in IEEE Transactions on Signal Processing, 59(7): 3168-3181 (2011)
 53. Zhu Han, Rong Zheng, Vincent Poor, “Repeated Auctions with Bayesian Nonparametric Learning for Spectrum Access in Cognitive Radio Networks”, in IEEE Transactions on Wireless Communications, 10(3): 890-900 (2011)
 54. Cunqing Hua, Rong Zheng, “On link-level starvation in dense 802.11 wireless community networks”. Computer Networks, 54 (17): 3159-3172 (2010)
 55. Rong Zheng, Khuong Vu, Amit Pendharkar, Obstacle Discovery in Distributed Actuator and Sensor Networks, in ACM Transactions on Sensor Networks, 7 (3): 22:1 – 22:24 (2010)

56. Peng Li, Haichang Gu, Gangbing Song, Rong Zheng, YL Mo, "Concrete Structural Health Monitoring Using Piezoceramic-Based Wireless Sensor Networks", SPIE International Journal on Smart Structures and Systems, SI on Wireless Sensor Advances and Applications for Civil Infrastructure Monitoring, 6 (5-6): 731-748 (2010)
57. Richard Barton and Rong Zheng, "Order-optimal Data Aggregation in Wireless Sensor Networks", IEEE Transactions on Information Theory, 56(11): 5811-5821, 2010
58. Qixin Wang, Rong Zheng, Ajay Tirumala, Xue Liu, Sha Liu, "Lightning: A Hard Real-Time, Fast, and Lightweight Low-End Wireless Sensor Election Protocol for Acoustic Event Localization", in IEEE Transactions on Mobile Computing, 7(5): 570-584 (2008)
59. Rong Zheng, "Asymptotic Bounds of Information Dissemination in Power-constrained Wireless Networks", in IEEE Transactions on Wireless Communications, 7(1), 251-259 (2008)
60. Rong Zheng, Jennifer Hou and Lui Sha, "Optimal Block Design for Asynchronous Wakeup and Its Applications in Multi-hop Wireless Networks", IEEE Transactions on Mobile Computing, 5(9):1228-1241 (2006)
61. Rong Zheng, Jennifer Hou and Lui Sha, "Performance Analysis of Power Management Policies in Wireless Networks", in IEEE Transactions on Wireless Communications, 5(6): 1351-1361 (2006)
62. Rong Zheng, Robin Kravet, "On-demand Power Management for Ad Hoc Networks", Elsevier Ad Hoc Networks Journal, 3(1): 51-68 (2005)
63. Guanghui He, Rong Zheng, Indranil Gupta, "A Framework for Time Indexing in Sensor Networks", in ACM Transactions on Sensor Networks, 1 (1): 101-133 (2005)
64. Rong Zheng, Ye Ge, Jennifer Hou and Sandy Thuel. "A Case for Mobility Support with Temporary Home Agent", ACM Mobile Computing and Communications Review (MC2R), 6(1): 32-46 (2002)

Conference

1. Malik, Natasha and Mitchell, Andrew and Liao, Longyun and Gravesande, Janelle and Thong, Bruce and Gardner, Paula and Carlesso, Lisa and Vrkljan, Brenda and Zheng, Rong. (2024). Annotating Virtual Tai Chi Instruction to Improve Learning Outcomes for Older Adults. International Conference on Human- Computer Interaction (HCII), (364--383)
2. Yao, Zhiyun and Wang, Xuanzhi and Niu, Kai and Zheng, Rong and Wang, Junzhe and Zhang, Daqing. (2024). WiProfile: Unlocking Diffraction Effects for Sub-Centimeter Target Profiling Using Commodity WiFi Devices. Proceedings of the 30th Annual International Conference on Mobile Computing and Networking (MobiCom)
3. Liao, Longyun and Mitchell, Andrew and Zheng, Rong. (2024). MirrorCalib: Utilizing Human Pose Information for Mirror-based Virtual Camera Calibration. IEEE International Conference on Advanced Video and Signal-Based Surveillance (AVSS)
4. Nalaie, Keivan and Zheng, Rong. (2024). Learning Online Policies for Person Tracking in Multi-View Environments. IEEE International Conference on Advanced Video and Signal-Based Surveillance (AVSS)
5. B. Zhang, Z. Zhou, B. Jiang, R. Zheng, SUPER: Seated Upper Body Pose Estimation using mmWave Radars, 9th ACM/IEEE Conference on Internet of Things Design and Implementation (IoTDI), 2024
6. Weiyang Chen, Hongliu Yang, Xiaoyang Bi, Rong Zheng, Fusang Zhang, Peng Bao, Zhaoxin Chang, Xujun Ma, and Daqing Zhang. 2023. Environment-aware Multi-person Tracking in Indoor Environments with MmWave Radars. Proc. ACM Interact. Mob. Wearable Ubiquitous Technol. 7, 3, Article 89 (UbiComp/IMWUT), 2023
7. Yujiao Hao, Boyu Wang, and Rong Zheng. "VALERIAN: Invariant Feature Learning for IMU Sensor-based Human Activity Recognition in the Wild." Proceedings of the 8th ACM/IEEE Conference on Internet of Things Design and Implementation (IoTDI), 2023
8. Keivan Nalaie and Rong Zheng, AttTrack: Online Deep Attention Transfer for Multi-object Tracking, IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023
9. Shervin Manzuri Shalmani, Fei Chiang, Rong Zheng, Efficient Action Recognition Using Confidence Distillation, 26th International Conference on Pattern Recognition (ICPR), 2022

10. [Navid Zandi](#), Awny El-Mohandes, Rong Zheng, Individualizing Head Related Transfer Functions for Binaural Acoustic Applications, ACM/IEEE International Conference on on Information Processing in Sensor Networks (IPSN) 2022
11. [Keivan Nalaie](#), Renjie Xu, Rong Zheng, DeepScale: Online Frame Size Adaptation for Multi-object Tracking on Smart Cameras and Edge Servers, ACM/IEEE International Conference on Internet of Things Design and Implementation (IoTDI) 2022
12. Nithin G R, Mihika Chhabra, [Yujiao Hao](#), Boyu Wang, Rong Zheng, Sensor-Based Human Activity Recognition for Elderly In-patients with a Luong Self-Attention Network, IEEE/ACM international conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE 2021)
13. Fusang Zhang, Zhaoxin Chang, Jie Xiong, Rong Zheng, Junqi Ma, Kai Niu, Beihong Jin, Daqing Zhang, "Unlocking the Beamforming Potential of LoRa for Long-range Multi-target Respiration Sensing", Ubicomp/IMWUT, 2021
14. [Mehdi Jafarizadeh](#), [Xingzhi Liu](#), Rong Zheng, "SoftBLE: An SDN Framework for BLE-based IoT Networks", The 6th ACM/IEEE Conference on Internet of Things Design and Implementation (IoTDI), 2021
15. [Yongyong Wei](#), Rong Zheng, "Multi-Robot Path Planning for Mobile Sensing through Deep Reinforcement Learning", IEEE International Conference on Computer Communications (INFOCOM), 2021
16. [Mehdi Jafarizadeh](#) and Rong Zheng, "An Analytical Study of Low Energy Monitoring Networks for Large-Scale Data Centers", IEEE Global Communications Conference (Globecom), 2020
17. Weiyang Chen, Kai Niu, Deng Zhao, Rong Zheng, Dan Wu, Wei Wang, Leye Wang, and Daqing Zhang. "Robust Dynamic Hand Gesture Interaction using LTE Terminals." In 2020 19th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN), pp. 109-120.
18. [Yongyong Wei](#), Rong Zheng, Informative Path Planning for Mobile Sensing with Reinforcement Learning. INFOCOM, 2020: 864-873
19. [Chaokun Zhang](#), Rong Zheng, Yong Cui, Chenhe Li, Jianping Wu, Delay-Sensitive Computation Partitioning for Mobile Augmented Reality Applications. IWQoS 2020: 1-10
20. Paula Gardner, Caitlin McArthur, Adekunle Akinyemi, Stephen Surlin, Rong Zheng, Alexandra Papaioanno, [Yujiao Hao](#), [Jason Xu](#), Employing interdisciplinary approaches in designing with fragile older adults; Advancing ABLE for Arts-based rehabilitative play and complex learning, 1st International Conference On Human-Computer Interaction (HCII), 2019
21. [Yihao Fang](#), [Ziyi Jin](#), Rong Zheng, TeamNet: A Collaborative Inference Framework on the Edge, ICDCS 2019
22. [Chenhe Li](#), [Jun Li](#), [Mehdi Jafarizadeh](#), Ghada Badaway, Rong Zheng, LEMoNet: Low Energy Wireless Sensor Network Design for Data Center Monitoring, IFIP Networking 2019
23. Minming Ni, [Mehdi Jafarizadeh](#), Rong Zheng, On the Effect of Multi-Packet Reception on Redundant Gateways in LoRAWANs, ICC 2019 (**Best paper award**)
24. [Mehdi Jafarizadeh](#), [Peiyang Tsai](#), Rong Zheng, Thermal Piloting: A Novel Approach for Sensor Localization in Data Center Monitoring, DCOSS 2019
25. [Yu-Ting Wang](#), [Jun Li](#), Rong Zheng, Dongmei Zhao, "ARABIS: an Asynchronous Acoustic Indoor Positioning System for Mobile Devices", International Conference on Indoor Positioning and Indoor Navigation (IPIN'17)
26. [Qiang Xu](#), [Chenhe Li](#), Rong Zheng, "TuRF: Fast Data Collection for Fingerprint-based Indoor Localization", International Conference on Indoor Positioning and Indoor Navigation (IPIN'17)
27. [Ala Shaabana](#), Rong Zheng, Joey Legere, and Martin v. Mohrenschildt , "Finger Movement Recognition During Ballistic Movements Using Electromyography", IEEE/ACM Conference on Connected Health: Applications, Systems, and Engineering Technologies (CHASE), Philadelphia, July, 2017
28. [Qiang Xu](#), Rong Zheng, "When Data Acquisition Meets Data Analytics: A Distributed Active Learning Framework for Optimal Budgeted Mobile Crowdsensing", in Proceedings of Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Atlanta, June 2017

29. Yu-Ting Wang, Rong Zheng, Dongmei Zhao: Towards Zero-Configuration Indoor Localization Using Asynchronous Acoustic Beacons, IEEE IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC), Paris, France, Sept., 2016
30. Chaokun Zhang, Yong Cui, Rong Zheng, Jinlong E, Jianping Wu, “Multi-Resource Partial-Ordered Task Scheduling in Cloud Computing”, short paper, IEEE/ACM International Symposium on Quality of Service (IWQoS), Beijing, China, June, 2016
31. Muhammad Hammuda, Rong Zheng, “Full-duplex Spectrum Sensing and Access in Cognitive Radio Networks with Unknown Primary User Activities”, IEEE International Conference on Communications (ICC), Kuala Lumpur, Malaysia, 2016
32. Ala Shaabana, Rong Zheng, Zhipeng Xu, “SiCILIA: A Smart Sensor System for Clothing Insulation Inference”, IEEE Global Communications Conference (Globecom), San Diego, CA, 2015
33. Qiang Xu, Rong Zheng, “Automated Detection of Burned-out Lights Using Indoor Positioning”, International Conference on Indoor Positioning and Indoor Navigation (IPIN), Calgary, AB, Oct., 2015
34. Qiang Xu, Rong Zheng, Steve Hranilovi, “IDyLL: Indoor Localization using Inertial and Light Sensors on Smartphones”, ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp), Osaka, Japan, 2015
35. Hadi Meshgi, Dongmei Zhao, Rong Zheng, “Joint Channel and Power Allocation in Underlay Multicast Device-to-Device Communications”, IEEE International Conference on Communications (ICC), London, UK, 2015
36. Lingzhi Wang, Cunqing Hua, Rong Zheng, Rui Ni, “Online Channel Selection and User Association in High-density WiFi Networks”, IEEE International Conference on Communications (ICC), London, UK, 2015
37. Huy Nguyen, Rong Zheng, “A data-driven study of influences in Twitter communities”, IEEE International Conference on Communications (ICC), 2014
38. Walid Saad, Zhu Han, Rong Zheng, Mrouane Debbah, Vincent Poor, “A College Admissions Game for Uplink User Association in Wireless Small Cell Networks”, Proceedings of the Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Toronto, May, 2014
39. Guanbo Zheng, Rong Zheng, “Joint Neighbor Discovery and Contention Relationship Inference in Wireless Networks”, International Conference on Wireless Algorithms, Systems, and Applications (WASA), Harbin, China, June, 2014
40. Mohammad Esmalifalak, Nam Nguyen, Rong Zheng, Zhu Han, “Detecting Stealthy False Data Injection Using Machine Learning in Smart Grid”, the IEEE Global Communications Conference (Globecom), Atlanta, GA, Nov., 2013
41. Guanbo Zheng, Cunqing Hua, Qixin Wang, Rong Zheng, “A Robust Relay Placement Framework for 60GHz mmWave Wireless Personal Area Networks”, the IEEE Global Communications Conference (Globecom), Atlanta, GA, 2013
42. Khuong Vu, Rong Zheng, “Spatial skyline query with location uncertainty”, ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL), Orlando, FL, July, 2013 (short paper)
43. Feng Tan, Yufei Wang, Qixin Wang, Lei Bu, Rong Zheng, Neeraj Suri, “Guaranteeing Proper-Temporal-Embedding safety rules in wireless CPS: A hybrid formal modeling approach”, IEEE/IFIP International Conference on Dependable Systems and Networks (DSN) 2013
44. Yunghsiang S. Han, Hung-Ta Pai, Rong Zheng, Pramod K. Varshney, “Update-efficient regenerating codes with minimum per-node storage”. IEEE International Conference on Information Theory (ISIT), Istanbul, Turkey, June, 2013
45. Nam Nguyen, Khuong Vu, Rong Zheng, Zhu Han, “UMLI: An Unsupervised Mobile Locations Extraction Approach with Incomplete Data”, IEEE IEEE Wireless Communications & Networking Conference (WCNC), Shanghai, China, April, 2013 (Best Paper Award)

46. Rong Zheng, Thanh Le, Zhu Han, “Approximate Online Learning for Passive Monitoring of Multi-channel Wireless Networks”, in Proceedings of the 32nd Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Toronto, Canada, 2013
47. Qixin Wang, Yufei Wang, Rong Zheng, Xue Liu, “Curbing Aggregate Member Flow Burstiness to Bound End-to-End Delay in Networks of TDMA Crossbar Real-Time Switches,” in Proc. of the 33rd IEEE Real Time Systems Symposium (RTSS’12), San Juan, Puerto Rico, Dec., 2012
48. Huy Nguyen and Rong Zheng, Influence Spread in Large-Scale Social Networks - A Belief Propagation Approach in Proceedings of the 23rd European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD’12), September 24-28, Bristol, UK, 2012.
49. Soji Omiwade, Rong Zheng, “Online Data Recovery in Wireless Sensor Networks”, 9th Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON), 2012
50. Khuong Vu, Rong Zheng, Jie Gao, “Efficient Algorithms for K-Anonymous Location Privacy in Participatory Sensing”, in Proceedings of the 31st Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Miami, FL, 2012
51. Yunghsiang Han, Rong Zheng, WH Mow, “Exact Regenerating Codes for Byzantine Fault Tolerance in Distributed Storage” in Proceedings of the 31st Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Miami, FL, 2012
52. Khuong Vu, Rong Zheng, “Geometric Algorithms for Target Localization and Tracking Under Location Uncertainties in Wireless Sensor Networks”, in Proceedings of the 31st Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Miami, FL, 2012
53. Mohammad Esmalifalak, Huy Nguyen, Rong Zheng, and Zhu Han, “Stealth False Data Injection using Independent Component Analysis in Smart Grid”, in the IEEE SmartGridComm, Oct. 2011, Brussels, Belgium
54. Guanbo Zheng, Dong Han, Rong Zheng, Christopher Schmitz, Xiaojing Yuan, “A Link Quality Inference Model for IEEE 802.15.4 Low-Rate WPANs”, in the IEEE Global Communications Conference (GlobeCom), Houston, Tx, 2011
55. Pallavi Arora, Na Xia, Rong Zheng, “A Gibbs Sampler Approach for Optimal Distributed Monitoring of Multi-channel Wireless Networks”, in the IEEE Global Communications Conference (GlobeCom), Houston, Tx, 2011
56. Huy Nguyen, Nam Nguyen, Guanbo Zheng, Zhu Han, Rong Zheng, “Binary Blind Identification of Wireless Transmission Technologies for Wide-band Spectrum Monitoring”, in the IEEE Global Communications Conference (GlobeCom), Houston, Tx, 2011
57. Soji Omiwade, Rong Zheng, “Maximum Lifetime Data Regeneration for Persistent Storage in Wireless Sensor Networks”, in the IEEE Global Communications Conference (GlobeCom), Houston, Tx, 2011
58. Mohammad Esmalifalak, Huy Nguyen, Rong Zheng, Zhu Han, “Stealth False Data Injection using Independent Component Analysis in Smart Grid”, IEEE SmartGridComm, Brussels, Belgium, 2011
59. Khuong Vu and Rong Zheng, “An Incremental Algorithm for High Order Maximum Voronoi Diagram Construction”, 23rd Canadian Conference on Computational Geometry, August, Toronto, Canada, 2011
60. Yufei Wang, Qixin Wang, Guanbo Zheng, Zheng Zeng, and Rong Zheng, “WiCop: Engineering WiFi Whitespaces for Safe Operations of Wireless Body Networks in Medical Applications,” in the 32nd IEEE Real-time Systems Symposium (RTSS), Vienna, Austria, 2011
61. Pallavi Arora, Csaba Szepesvari, Rong Zheng, “Sequential Learning for Optimal Monitoring of Multi-channel Wireless Networks”, Proceedings of the Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Shanghai, China, 2011
62. Khuong Vu, Rong Zheng, “Robust Coverage under Uncertainty in Wireless Sensor Networks”, Proceedings of the Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Shanghai, China, 2011
63. Nam Tuan Nguyen, Guanbo Zheng, Zhu Han and Rong Zheng, “Device Fingerprinting to Enhance Wireless

- Security using Nonparametric Bayesian Method”, Proceedings of the Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Shanghai, China, 2011
64. Khong Vu and Rong Zheng, “Multi-target Tracking in Distributed Active Sensor Networks”, Military Communication Conference (Milcom), San Jose, CA, 2010.
 65. Na Xia, Khuong Vu, Rong Zheng, “Sensor Placement for Minimum Exposure in Distributed Active Sensing Networks”, IEEE Global Communication Conference (GlobeCom), Miami, FL, 2010
 66. Arun Chhetri, Huy Nguyen, Gabriel Scalosub and Rong Zheng, “On Quality of Monitoring for Multi-channel Wireless Infrastructure Networks”, the ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), Chicago, IL, 2010
 67. Huy Nguyen, Rong Zheng, Zhu Han, “Binary is Good: A Binary Inference Framework for Primary User Separation in Cognitive Radio Networks”, the 5th International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Crowncom), Cannes, France, 2010
 68. Yunghsiang Han, Soji Omiwade and Rong Zheng, “Persistent Distributed Storage with Progressive Decoding under Byzantine Failures”, Proceedings of the Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM) mini-symposium, San Diego, CA, 2010
 69. Arun Chhetri, Rong Zheng, “WiserAnalyzer: A Passive Monitoring Framework for WLANs”, The 5th International Conference on Mobile Ad-hoc and Sensor Networks (MSN), Wuyishan, China, 2009
 70. Zhu Han, Rong Zheng and Vincent Poor, “Repeated Auctions with Learning for Spectrum Access in Cognitive Radio Networks”, Proceedings of the Forty-seventh Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL, 2009 (Invited)
 71. Q. Xu, R. Prithivathi, J. Subhlok, Rong Zheng, and Sara Voss, “Logicalization of MPI Communication Traces”, IEEE International Symposium on Workload Characterization, Austin, TX, 2009
 72. Peng Li, Gangbing Song, Rong Zheng and Y. L. Mo, “Piezo-Based Wireless Sensor Networks for Civil Structural Health Monitoring”, 1st International Postgraduate Conference on Infrastructure and Environment, Hong Kong, China, 2009 (best paper award)
 73. Rong Zheng and Amit Pendharkar, “Obstacle Discovery in Distributed Active Sensor Networks”, Proceedings of the 28th Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Rio de Janeiro, Brazil, 2009
 74. Vivek Aseeja and Rong Zheng, “MeshMan: A Management Framework for Wireless Mesh Networks”, Proceedings of the 11th IFIP/IEEE International Symposium on Integrated Network Management (IM), Long Island, NY, 2009
 75. Cunqing Hua, Song Wei and Rong Zheng, “Robust Channel Assignment for Link-level Resource Provisioning in Multi-radio Multi-channel Wireless Networks”, Proceedings of the 16th IEEE International Conference on Network Protocols (ICNP), Orlando, FL, 2008
 76. Cunqing Hua and Rong Zheng, “Starvation Modeling and Identification in Dense WLAN Networks”, Proceedings of the 27th Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Phoenix, AZ, 2008
 77. Rong Zheng and Chengzhi Li, “How Good is Opportunistic Routing? – A Reality Check under Rayleigh Fading Channels”, Proceedings of the 11-th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (ACM MSWiM), Vancouver, BC, 2008
 78. Soji Omiwade, Rong Zheng and Cunqing Hua, “Practical localized network coding in wireless mesh networks”, Proceedings of Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON), San Francisco, CA, 2008
 79. Amit Pendharkar, Claudio Olmi, Rong Zheng and Gangbing Song, “High Rate Sensing in Wireless Civil Structure monitoring”, Proceedings of the 11th Biennial ASCE Aerospace Division International Conference – Intelligent Sensors and Actuators Track, Los Angeles, CA, 2008 (invited paper)
 80. Rong Zheng, Richard Barton, “Toward Optimal Data Aggregation in Random Wireless Sensor Networks”,

- Proceedings of the 26th Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Anchorage, AK, 2007
81. Sumit Gupta and Rong Zheng and Albert Cheng, “ANDES: an Anomaly Detection System for Wireless Sensor Networks”, Proceedings of the Fourth IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS), Pisa, Italy, 2007
 82. Muqith A Mohammad, Rong Zheng, Richard Barton, “Location Sensing Using Minmax Robust Thin-spline”, Proceedings of the Forty-Fourth Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL, 2006
 83. Rong Zheng, “Information Dissemination in Power-constrained Wireless Networks”, Proceedings of the 25th Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), Barcelona, Spain, 2006
 84. Richard Barton and Rong Zheng, “Cooperative Time-Reversal Communication is Order-Optimal for Data Aggregation in Wireless Sensor Networks”, Proceedings of IEEE International Symposium on Information Theory (ISIT), Seattle, WA, 2006
 85. R.J.Barton and Rong Zheng, “Order-Optimal Data Aggregation in Wireless Sensor Networks Using Cooperative Time-Reversal Communication,” Proceedings of the 40th Annual Conference on Information Sciences and Systems (CISS), Princeton, NJ, 2006
 86. Rong Zheng, Jennifer Hou and Lui Sha, “On Time-out Driven Power Management Policies for Wireless Networks”, Proceedings of the IEEE Global Communications Conference (GlobeCom), Dallas, TX, 2004
 87. Qixin Wang, Rong Zheng, Ajay S. Tirumala and Lui Sha, “Lightning: A Fast and Light-Weight Acoustic Location Protocol Using Low-End Wireless Micro-Sensors”, Proceedings of 25th IEEE International Real-Time Systems Symposium (RTSS), Lisbon, Portugal, 2004 (**Nominated for best paper award**)
 88. Rong Zheng, Jennifer Hou and Lui Sha. “Asynchronous Wakeup for Ad Hoc Networks”, Proceedings of the 4th ACM international symposium on mobile ad hoc networking and computing (MobiHoc), Minneapolis, MA, June 2003
 89. Rong Zheng and Robin Kravets. “On-demand Power Management for Ad Hoc Networks”, Proceedings of the 22nd Annual Joint Conference of the IEEE Computer and Communications Societies (INFOCOM), San Francisco, CA, April 2003
 90. Qixin Wang, Weipeng Chen, Rong Zheng, Kihwal Lee and Lui Sha. “Acoustic Target Tracking Using Tiny Wireless Sensor Devices”, Proceedings of Information Processing in Sensor Networks (IPSN), Palo Alto, CA, April 2003
 91. Wei Lin, Rong Zheng and Jennifer Hou. “How to Make Assured Service More Assured”, Proceedings of the 8th IEEE International Conference on Network Protocols (ICNP), Toronto, Canada, 1999

PRESENTATIONS

Keynotes/Plenary Talk

- 2023 “Non-contact RF sensing for health monitoring”, WeSpark Health Research Conference, 2023
- 2013 “Some Advancements in Wireless Structural Health Monitoring”, IEEE Sensor Application Symposiums, 2013, Houston, Tx, USA
- 2011 “Toward Autonomous Structure Health Monitoring for Intelligent Transportation”, The 6th International Symposium on Embedded Technology (ISET), Jeju, South Korea

Invited Talks/Lectures (Since 2013)

- 2024 “Human Centric Sensing: Applications, Techniques and Challenges”, Nanyang Technological University, National University of Singapore, Queen’s University, Chinese University of Hong Kong (Shenzhen), 2024
- 2021 Toward Smart Mobility for the Aging Population, Human Machine Interaction Workshop
- 2020 Informative Path Planning for Mobile Spatial Sensing, Zhejiang University
- 2020 Leveraging MIRA/LCMA funds, MIRA & Labarge Research Showcase

- 2019 Autonomous Monitoring of Data Center Operations. International Workshop on Intelligent Networking and Communication Systems, Shenzhen, China
- 2019 Informative Path Planning for Mobile Spatial Sensing. International Summit on Embedded IoT, Shenzhen, China
- 2018 Machine Learning and Big Data: Where do they fit in CPS. IPSN'18 Panel, Porto, Portugal
- 2017 “Sensing and Data Acquisition in the Big Data Era: What, Where and When”, The International Workshop on Frontiers of Cyber-Physical Systems and Internet of Things (IWFCI), Nanjing, China
- 2017 “Sensing and Data Acquisition in the Big Data Era: What, Where and When”, Michigan State University, USA
- 2017 “Sensing and Data Acquisition in the Big Data Era: What, Where and When”, Western Ontario University, Canada
- 2017 “The Holy Grail of Sub-meter Indoor Localization with Low-cost Infrastructure”, Nanjing University, China
- 2017 “The Holy Grail of Sub-meter Indoor Localization with Low-cost Infrastructure”, Wuhan University, China
- 2017 “The Holy Grail of Sub-meter Indoor Localization with Low-cost Infrastructure”, Beijing Jiaotong University, China
- 2017 “The Holy Grail of Sub-meter Indoor Localization with Low-cost Infrastructure”, Chinese University of Geoscience (Wuhan), China
- 2017 “Demystifying Machine Learning (for Engineers ...)”, CIRC Lunch & Learn
- 2016 Summer Course on Mobile Data Analytics, Beijing Jiaotong University, China
- 2016 “Toward Personalized Thermal Environments”, Microsoft Research, Redmond, WA, USA
- 2015 MacQuest, DemoCamp, Hamilton, ON
- 2015 “Sequential Learning and Decision Making in Wireless Resource Management”, Beijing Jiaotong University, China
- 2015 “Location, Location, Location”, University of Houston, USA
- 2014 “Recent Trends in Wireless Networking and Communications”, Panel presentation, International Conference on Wireless Algorithms, Systems, and Applications, Harbin, China
- 2014 “Opportunities (and Challenges) of IoT in Environmental Monitoring & Energy Management”, MacWater Workshop, McMaster
- 2014 “The Holy Grail of Sub-meter Indoor Localization with Low-cost Infrastructure”, Tsinghua University, China
- 2014 “Sequential Learning and Decision Making in Wireless Resource Management”, Shanghai Jiaotong Univ., China
- 2014 “SuSHI: A Smart Sensor System for Thermal Inference”, University of Houston, USA
- 2014 “The Tale of Three Sensors”, Xerox, Canada
- 2013 “Toward Autonomous Structure Health Monitoring”, University of Buffalo, USA
- 2013 “Binary Independent Component Analysis with OR Mixtures and Its Applications”, Syracuse University, USA
- 2013 “Online Inference of Recurring and New Indoor Places of Mobile Users”, University of Waterloo, Canada
- 2013 “Pervasive Computing – Challenges and Opportunities”, IEEE Annual Computer Comm. Workshop, Niagara, NY, USA

Patent

- 2021 Method and system for determining individualized head related transfer functions (provisional)

CONTRIBUTION TO SOFTWARE RELEASE

- 2016, 2017 MacQuest, Apple App Store, <https://itunes.apple.com/ca/app/macquest/id1099180345?mt=8>
- 2015, 2018 MacQuest, Google Play, <https://play.google.com/store/apps/details?id=com.mcmaster.wiser.idyll&hl=en>
- 2004 JavaSim, <https://sites.google.com/site/jsimofficial/>

ADMINISTRATIVE RESPONSIBILITIES

Department

2024 – Tenue and Promotion Committee
2024 – CS Undergraduate curriculum committee
2020 – Member, Faculty search committee
2017 – 2019 Organizer: 1st CAS Graduate Poster and Demo Competition
2016 – 2021 Associate Chair Graduate Study and Research
2016 – 2020 Member, Graduate Curriculum and Policy Committee
2020 – present Member, Faculty Search Committee
2016 – 2021 Member, Awards Committee
2016 – 2021 Chair, Graduate Curriculum and Policy Committee
2016 – 2021 Chair, Research excellence committee
2016 Member, Department Chair Search Committee
2014 – 2016 Software Engineering Undergraduate Advisor
2014 - 2016 Member, Tenure, Promotions, and Consulting Committee
2014 – 2016 Member, PhD Comprehensive Exam Committee

Faculty

2021 Dean’s representative on SEPT Search Committee
2021 – 2024 Tenure and Promotion Committee
2020 – 2021 Ad Hoc Committee on CRC search
2016 – present Member, Faculty Engr. BTEch Advisory Committee
2014 – 2015 Member, Faculty Engineering 1 Operating Committee
2014 – 2016 eHealth Recruitment, Admissions, Curriculum and Internship

University

2016 – 2018 Member, MacData Steering Committee
2017 – 2018 Member, Wireless Working Committee (UTS)