Parth H. Pathak

Assistant Professor Computer Science Department George Mason University Fairfax, VA 22030

Tel: (703) 993-6232

Email: phpathak@gmu.edu

Homepage: http://www.phpathak.com

Research Interests

Wireless and mobile computing: high-speed wireless and mobile networks, multi-gigabit wireless networking, Internet-of-Things, RF and mmWave sensing, mobile and wearable sensing, ubiquitous computing, cyber-physical systems

Education

o Ph.D. in Computer Science (2012)

North Carolina State University, Raleigh, NC, USA

Advisor: Rudra Dutta

Thesis: Designing for Network and Service Continuity in Wireless Networks

• **M.S. in Computer Science** (2010, En Route to Ph.D.)

North Carolina State University, Raleigh, NC, USA

Advisor: Rudra Dutta

• **B.E. in Information Technology** (2005)

Gujarat University (L.D. College of Engineering), Gujarat, India.

Professional Experience and Employment

Assistant Professor (Aug '16 - Present)

Computer Science Department, George Mason University, Fairfax, VA, USA

Postdoctoral Research Fellow (Aug. '12 - July '16)

Computer Science Department, University of California, Davis, CA, USA

Mentor: Prasant Mohapatra

• Research Assistant (Aug. '08 - July '12)

Computer Science Department, North Carolina State University, Raleigh, NC, USA

Software Intern (May '08 - Aug. '08)

Cisco Systems Inc., Wireless Network Business Unit, San Jose, CA, USA

Research Intern (May '06 - Dec. '06)

Qualcomm Flarion Research Center, Bedminster, NJ, USA

Publications

Total citations: 2118, H-index: 17, i-10 index: 25

* indicates students currently advising at GMU, † indicates students advised at UC Davis as a postdoc

Books

1. Parth H. Pathak and Rudra Dutta, "Designing for Network and Service Continuity in Wireless Mesh Networks", *Springer Science and Business Media*, 2012.

Journals (Peer-reviewed)

- 1. Hao Fu[†], Pengfei Hu[†], Zizhan Zheng, Aveek Das[†], Parth Pathak, Tianbo Gu, Sencun Zhu, and Prasant Mohapatra, "Towards Automatic Detection of Nonfunctional Sensitive Transmissions in Mobile Applications", *IEEE Transactions on Mobile Computing* **(TMC)**, 2020. [Impact Factor = 4.4]
- 2. Pengfei Hu[†], Parth H. Pathak, Huanle Zhang, Zhicheng Yang[†], and Prasant Mohapatra, "High Speed LED-to-Camera Communication using Color Shift Keying with Flicker Mitigation", *IEEE Transactions on Mobile Computing* **(TMC)**, 2019. [Impact Factor = 4.1]
- 3. Zhicheng Yang[†], Parth H. Pathak, Yunze Zeng[†], Xixi Liran and Prasant Mohapatra, "A Vital Sign and Sleep Monitoring Using Millimeter Wave", *ACM Transactions on Sensor Networks* **(TOSN)**, Volume 13 Issue 2, June 2017. [Impact Factor = 2.6]
- 4. Aveek K. Das[†], Parth H. Pa thak, Chen-Nee Chuah, Prasant Mohapatra, "Privacy-aware Contextual Localization using Network Traffic Analysis", *Elsevier* **Computer Networks**, Volume 118, May 2017. [Impact Factor = 2.5]
- 5. Yunze Zeng[†], Parth H. Pathak, Prasant Mohapatra, "Throughput, energy efficiency and interference characterisation of 802.11ac", *Transactions on Emerging Telecommunications Technologies* **(ETT)**, Volume 28, Jan 2017. [Impact Factor = 1.6]
- 6. Parth H. Pathak, Xiaotao Feng, Pengfei Hu[†] and Prasant Mohapatra, "Visible Light Communication, Networking and Sensing: A Survey, Potential and Challenges", *IEEE Communications Surveys and Tutorials* (COMSOC-CST), 2015.
- 7. Arun Raghuramu[†], Parth H. Pathak, Hui Zang, Jinyoung Han, Chang Liu, Chen-Nee Chuah, "Uncovering the footprints of malicious traffic in wireless/mobile networks", *Elsevier Computer Communications* (ComCom), Volume 95, Dec. 2016. [Impact Factor: 3.3]
- 8. Aveek K. Das[†], Parth H. Pathak, Chen-Nee Chuah, and Prasant Mohapatra, "Characterization of Wireless Multidevice Users", *ACM Transactions on Internet Technology* **(TOIT)**, Vol. 16, Dec. 2016. [Impact Factor = 2.0]
- 9. Parth H. Pathak, Xiaotao Feng, Pengfei Hu[†] and Prasant Mohapatra, "Visible Light Communication, Networking and Sensing: A Survey, Potential and Challenges", *IEEE Communications Surveys and Tutorials* (COMSOC-CST), Vol. 17, Sept. 2015. [Impact Factor = 17.1]
- 10. Parth H. Pathak, Rudra Dutta and Prasant Mohapatra, "On Availability-Performability Trade-off in Wireless Mesh Networks", *IEEE Transactions on Mobile Computing* (TMC), Vol. 14, Jun 2014. [Impact Factor = 3.8]
- 11. Kefeng Tan, Shraboni Jana, Parth H. Pathak and Prasant Mohapatra, "On Insider Misbehavior Detection in Cognitive Radio Networks", *IEEE Network Magazine, Special Issue on Security in Cognitive Radio Networks* (Network), Vol. 27, May 2013. [Impact Factor = 7.1]
- 12. Parth H. Pathak and Rudra Dutta, "Centrality-based Power Control for Hot-spot Mitigation in Multi-hop Wireless Networks", *Elsevier Computer Communications* (COMCOM), Vol. 35, May 2012. [Impact Factor: 3.3]
- 13. Parth H. Pathak and Rudra Dutta, "A Survey of Network Design Problems and Joint Design Approaches in Wireless Mesh Networks", *IEEE Communications Surveys and Tutorials* (COMSOC-CST), Vol. 13, June 2011. [Impact Factor = 17.1]

Conferences and Workshops (Refereed)

1. Yoon Chae*, Kang Min Bae, Parth Pathak, Song Min Kim, "On the Feasibility of Millimeter-wave Backscatter using Commodity 802.11ad 60 GHz Radios", ACM Workshop on Wireless Network

- *Testbeds, Experimental evaluation & Characterization* (WinTECH), collocated with ACM MobiCom, London (moved to virtual), 2020.
- Panneer Selvam Santhalingam*, Al Amin Hosain*, Ding Zhang*, Parth Pathak, Huzefa Rangwala and Raja Kushalnagar, "mmASL: Environment-Independent ASL Gesture Recognition using 60 GHz Millimeter-wave Signals", Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT/ UbiComp), Cancun, Mexico (moved to virtual), 2020. [Acceptance rate = 19%]
- 3. Panneer Selvam Santhalingam*, Yuanqi Du*, Riley Wilkerson*, Al Amin Hosain*, Ding Zhang*, Parth Pathak, Huzefa Rangwala, and Raja Kushalnagar, "Expressive ASL Recognition using Millimeterwave Wireless Signals", *IEEE International Conference on Sensing, Communication and Networking*, (SECON), Italy (moved to virtual), 2020. [acceptance rate = 27%]
- 4. Al Amin Hosain*, Panneer Selvam Santhalingam*, Parth Pathak, Jana Košecká, and Huzefa Rangwala, "Sign Language Recognition Analysis using Multimodal Data", *IEEE International Conference on Data Science and Advanced Analytics* (**DSAA**), Washington DC, USA, October 2019, [Acceptance Rate = 29%, Best Research Paper Award]
- 5. Ding Zhang*, Panneer Selvam Santhalingam*, Parth Pathak and Zizhan Zheng, "Characterizing Interference Mitigation Techniques in Dense 60 GHz mmWave WLANs", *International Conference on Computer Communications and Networks* (ICCCN), Valencia, Spain, July, 2019. [Acceptance Rate = 29%]
- 6. Zhicheng Yang[†], Parth Pathak, Mo Sha, Tingting Zhu, Junai Gan, Pengfei Hu[†], Prasant Mohapatra, "On Feasibility of Estimating Soluble Sugar Content using Millimeter-wave", *ACM/IEEE Conference on Internet of Things Design and Implementation* (IoTDI), Montreal, Canada, April 2019. [Acceptance Rate = 35%]
- 7. Ding Zhang*, Mihir Garude* and Parth H. Pathak, "mmChoir: Exploiting Joint Transmissions for Reliable 60GHz mmWave WLANs", ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), Los Angeles, USA, June 2018. [Acceptance Rate = 17%]
- 8. Zhicheng Yang[†], Parth H. Pathak, Jianli Pan, Mo Sha and Prasant Mohapatra, "Sense and Deploy: Blockage-aware Deployment of Reliable 60 GHz mmWave WLANs", *IEEE International Conference on Mobile, Ad-hoc and Sensor Systems* (MASS), Chengdu, China, Oct. 2018. [Acceptance Rate = unavailable, last 10 years average = 26%]
- 9. Aveek K. Das[†], Parth H. Pathak, Josiah Jee[†], Chen-Nee Chuah and Prasant Mohapatra, "WiFi-Assisted Non-Intrusive Multi-Modal Estimation of Building Occupancy", *ACM Conference on Embedded Networked Sensor Systems* (SenSys), Delft, The Netherlands, Nov. 2017. [Acceptance Rate = 17%]
- 10. Pengfei Hu[†], Parth H. Pathak, Yilin Shen, Hongxia Jin and Prasant Mohapatra, "PCASA: Proximity based Continuous and Secure Authentication of Personal Wearable Devices", *IEEE International Conference on Sensing, Communication and Networking* (SECON), June 2017. [Acceptance Rate = 26%]
- 11. Josiah Jee[†], Aveek Das[†], Parth H. Pathak, and Prasant Mohapatra, "MotionSync: Personal Energy Analytics through Motion Tags and Wearable Sensing", *ACM International Conference on Systems for Energy-Efficient Built Environments* (BuildSys), Stanford, CA, 2016. [Acceptance Rate = 24%, Best Paper Award Finalist]
- 12. Zhicheng Yang[†], Parth H. Pathak, Yunze Zeng[†], Xixi Liran and Prasant Mohapatra, "Monitoring Vital Signs Using Millimeter Wave", *ACM International Symposium on Mobile Ad Hoc Networking and Computing* (MobiHoc), Paderborn, Germany, July 2016. [Acceptance Rate = 18%]

- 13. Pengfei Hu[†], Parth H. Pathak, Aveek Das[†], Zhicheng Yang[†] and Prasant Mohapatra, "PLiFi: Hybrid WiFi-VLC Networking using Power Lines", *ACM Workshop on Visible Light Communication Systems* (VLCS), co-located with MobiCom 2016.
- 14. Hao Fu, Zizhan Zheng, Aveek K. Das[†], Parth H. Pathak, Pengfei Hu[†], Prasant Mohapatra, "Flow-Intent: Detecting Privacy Leakage from User Intention to Network Traffic Mapping", *IEEE International Conference on Sensing, Communication and Networking* (SECON), London, UK, June 2016. [Acceptance Rate = 26%]
- 15. Yunze Zeng[†], Parth H. Pathak and Prasant Mohapatra, "WiWho: WiFi-based Person Identification in Smart Spaces", *ACM/IEEE International Conference on Information Processing in Sensor Networks* (IPSN), Vienna, Austria, February 2016. [Acceptance Rate = 20%]
- 16. Aveek Das[†], Parth H. Pathak, Chen-Nee Chuah and Prasant Mohapatra, "Uncovering Privacy Leakage in BLE Network Traffic of Wearable Fitness Trackers", *ACM International Workshop on Mobile Computing Systems and Applications* (HotMobile), St. Augustine, FL, USA, Feb. 2016. [Acceptance Rate = 33%]
- 17. Pengfei Hu[†], Parth H. Pathak, Xiaotao Feng, Hao Fu and Prasant Mohapatra, "ColorBars: Increasing Data Rate of LED-to-Camera Communication using Color Shift Keying", *ACM International Conference on emerging Networking Experiments and Technologies* (CoNEXT), Heidelberg, Germany, December 2015. [Acceptance Rate = 17%]
- 18. Zhicheng Yang[†], Parth H. Pathak, Yunze Zeng[†] and Prasant Mohapatra, "Sensor-assisted Codebook-based Beamforming for Mobility Management in 60 GHz WLANs", *IEEE International Conference on Mobile Ad hoc and Sensor Systems* (MASS), Dallas, TX, USA, October 2015. [Acceptance Rate = 26%]
- 19. Muchen Wu[†], Parth H. Pathak and Prasant Mohapatra, "Monitoring Building Door Events using Barometer Sensor in Smartphones", *ACM International Joint Conference on Pervasive and Ubiquitous Computing* (**UbiComp**), Osaka, Japan, September 2015. [Acceptance Rate = 22%]
- 20. Muchen Wu[†], Parth H. Pathak and Prasant Mohapatra, "Enabling Privacy-Preserving First-Person Cameras using Low-Power Sensors", *IEEE International Conference on Sensing, Communication, and Networking* (SECON), Seattle, WA, USA, June 2015. [Acceptance Rate = 28%]
- 21. Aveek Das[†], Parth H. Pathak, Chen-Nee Chuah and Prasant Mohapatra, "Characterization of Wireless Multi-Device Users", *IEEE International Conference on Sensing, Communication, and Networking* (SECON), Seattle, WA, USA, June 2015. [Acceptance Rate = 28%]
- 22. Li Zhang[†], Parth H. Pathak, Muchen Wu[†], Yixin Zhao and Prasant Mohapatra, "AccelWord: Energy Efficient Hotword Detection through Accelerometer", *ACM International Conference on Mobile Systems, Applications, and Services* (MobiSys), Florence, Italy, May 2015. [Acceptance Rate = 13%]
- 23. Li Zhang[†], Chao Xu[†], Parth H. Pathak and Prasant Mohapatra, "Characterizing Instant Messaging Apps on Smartphones", *Passive and Active Measurements Conference* **(PAM)**, Springer Pub., New York, NY, USA, March 2015. [Acceptance Rate = 28%]
- 24. Chao Xu[†], Parth H. Pathak and Prasant Mohapatra, "Finger-writing with Smartwatch: A Case for Finger and Hand Gesture Recognition using Smartwatch", *ACM Workshop on Hot Topics in Mobile Computing Systems and Applications* (HotMobile), Santa Fe, NM, USA, February 2015. [Acceptance Rate = 27%]
- 25. Yunze Zeng[†], Parth H. Pathak, Chao Xu[†] and Prasant Mohapatra, "Your AP Knows How You Move: Fine-grained Device Motion Recognition through WiFi", *ACM Workshop on Hot Topics in Wireless* (HotWireless), Maui, HI, USA (co-located with Mobicom 2014), September 2014.

- 26. Yunze Zeng[†], Parth H. Pathak and Prasant Mohapatra, "A First Look at 802.11ac in Action: Energy Efficiency and Interference Characterization", *IFIP International Conference on Networking* (**Networking**), Trondheim, Norway, June 2014. [Acceptance Rate = 25%, Best Paper Award]
- 27. Aveek K. Das[†], Parth H. Pathak, Chen-Nee Chuah and Prasant Mohapatra, "Contextual Localization Through Network Traffic Analysis", *IEEE International Conference on Computer Communication* (INFOCOM), Toronto, Canada, May 2014. [Acceptance Rate = 19%]
- 28. Gaurish Deuskar, Parth H. Pathak and Rudra Dutta, "Packet Aggregation based Back-pressure Scheduling in Multi-hop Wireless Networks", *IEEE Wireless Communications and Networking Conference* (WCNC), Paris, France, April 2012. [Acceptance Rate = 32%]
- 29. Parth H. Pathak and Rudra Dutta, "Impact of Power Control on Capacity of TDM-scheduled Wireless Mesh Networks", *IEEE International Conference on Communications* (ICC), Kyoto, Japan, June 2011. [Acceptance Rate = 38%]
- 30. Parth H. Pathak and Rudra Dutta, "Using Centrality-based Power Control for Hot-spot Mitigation in Multi-hop Wireless Networks", *IEEE Global Communications Conference* (GlobeCom), Miami, FL, USA, December 2010. [Acceptance Rate = 36%]
- 31. Parth H. Pathak and Rudra Dutta, "Impact of Power Control on Relay Load Balancing in Wireless Sensor Networks", *IEEE Wireless Communications and Networking Conference* (WCNC), Sydney, Australia, April 2010. [Acceptance Rate = 37%]
- 32. Junbum Lim, Parth H. Pathak, M. Pandian, U. Patel, G. Deuskar, A. Danivasa, M.L. Sichitiu, and R. Dutta, "CentMesh: A Modular and Extensible Wireless Mesh Network Testbed", *International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities* (TridentCom), Berlin, Germany, May 2010.
- 33. Parth H. Pathak and Rudra Dutta, "Impact of Power Control on Capacity of Large Scale Wireless Mesh Networks", *IEEE International Symposium on Advanced Networks and Telecommunication Systems* (ANTS), New Delhi, India, December 2009.
- 34. Dheeraj Kandula, Parth H. Pathak and Rudra Dutta, "MF-TCP: Design and Evaluation of TCP for Message Ferry Delay Tolerant Networks", *Australasian Telecommunication Networks and Applications Conference* (ATNAC), Canberra, Australia, November 2009.
- 35. Parth H. Pathak, Divya Gupta and Rudra Dutta, "Loner Links Aware Routing and Scheduling in Wireless Mesh Networks", *IEEE International Symposium on Advanced Networks and Telecommunication Systems* (ANTS), Mumbai, India, December 2008.

Invited Papers

- 1. Ningning Cheng, Shaxun Chen, Parth H. Pathak, Prasant Mohapatra, "Long-term Privacy Profiling through Smartphone Sensors", *International Workshop on Social Sensing* (SocialSens), Dallas, TX, USA (co-located with MASS 2015), October 2015.
- 2. Christopher Buckley[†], Parth H. Pathak, Aveek Das[†], Chen-Nee Chuah and Prasant Mohapatra, "AnonAD: Privacy-aware Micro-targeted Mobile Advertisements without Proxies", *IEEE International Conference on Computer Communications and Networks* (ICCCN), Las Vegas, NV, USA, August 2015.
- 3. Yunze Zeng[†], Parth H. Pathak and Prasant Mohapatra, "Analyzing Shopper's Behavior through WiFi Signals", *ACM Workshop on Physical Analytics* (WPA), Florence, Italy (co-located with MobiSys 2015), May 2015.

Posters and Demos

- 1. Yixin Zhao[†], Parth H. Pathak, Chao Xu and Prasant Mohapatra, "Demo: Finger and Hand Gesture Recognition using Smartwatch", *ACM International Conference on Mobile Systems, Applications, and Services* (MobiSys), Florence, Italy, May 2015.
- 2. Parth H. Pathak, Sankalp Nimbhorkar and Rudra Dutta, "Poster: Channel Width Assignment using Relative Backlog: Extending Back-pressure to Physical Layer", *ACM International Symposium on Mobile Ad Hoc Networking and Computing* (MobiHoc), Hilton Head Island, SC, USA, June 2012.

Patents

- 1. Prasant Mohapatra, Parth H. Pathak and Yunze Zeng, "WiFi-based person-identification technique for use in smart spaces", US Patent No. US10045717B2, patent issued on 08/14/2018.
- 2. Prasant Mohapatra, Li Zhang, Parth H. Pathak and Muchen Wu, "Energy-efficient, accelerometer-based hotword detection to launch a voice-control system", US Patent App. 15/498,835, US Patent No. US10347249B2, patent issued on 07/09/2019.

Research Grants

Awarded

4 grants, total Mason value \$1.2M

1. **NSF: CNS-1815945** "NeTS: Small: Collaborative Research: Reliable 60 GHz WLANs through Coordination: Measurement, Modeling and Optimization",

Lead PI: Parth Pathak, Collaborative grant with Zizhan Zheng (Tulane University), Grant amount: \$499,028 (GMU Share: \$263,116), Duration: 10/2018 - 9/2021.

2. **NSF: CNS-1730083** "II-New: 60 GHz Millimeter-Wave Testbed for Multi-Gigabit Wireless Networking".

Lead PI: Parth Pathak, Co-PIs: Robert Simon, Brian Mark, Zhi Tian,

Grant amount: \$843,718, Duration: 10/2017 - 9/2019.

3. **GMU: Summer Impact Undergraduate Research** "Multi-modal Sign Language Recognition", Lead PI: Parth Pathak, Co-PIs: Huzefa Rangwala, Jana Kosecka, Linda Mason,

Grant amount: \$48,000, Duration: 05/2019 - 08/2019.

4. Google Faculty Research Award "Multimodal American Sign Language Recognition",

Lead PI: Jana Kosecka, Co-PIs: Parth Pathak, Huzefa Rangwala,

Grant Amount: \$50,894, Duration: 05/2019 - 05/2020.

Teaching

At George Mason University

1. CS 555: Computer Communications and Networks (Spring '19)

Enrollment: 25, Instructor rating: 4.63, Course rating: 4.42

2. CS 471: Operating Systems (Fall '18)

Enrollment: 6, Instructor rating: 5.00, Course rating: 4.50

3. CS 695: Wireless and Mobile Computing (Fall '17)

Enrollment: 21, Instructor rating: 4.82, Course rating: 4.76

4. CS 471: Operating Systems (Spring '17)

Enrollment: 47, Instructor rating: 4.03, Course rating: 3.79

5. CS 695: Wireless and Mobile Computing (Fall '16)

Enrollment: 11, Instructor rating: 4.80, Course rating: 4.80

Student Advising

At George Mason University

o PhD Dissertation Advisor

- 1. Ding Zhang (PhD, CS, Expected 2021)
- 2. Panneer Selvam Santhalingam (PhD, CS)
- 3. Yoon Chae (PhD, CS)
- 4. Shuai Wang (PhD, CS)
- 5. Ahmad Kamari (PhD, CS)

o PhD Dissertation Committee Member

- 1. Reem Albarrack (PhD IT)
- 2. Hanke Cheng (PhD ECE)
- 3. Abhishek Roy (PhD CS)
- 4. Arda Gumusalan (PhD CS, 2019)
- 5. Haoliang Wang (PhD CS, 2019)

Master Research Project

1. Mihir Garude (MS, ECE, Spring 17 - Summer 18)

Undergraduate Research

- 1. Yuanqi Du (NSF REU Fellowship)
- 2. Jesse McCandlish (Senior of the Year, 2020)
- 3. Ariana Havens
- 4. Allison Dockum
- 5. Dong Young Huh
- 6. Frederick Olson
- 7. Nguyen Dang
- 8. Riley Wilkerson
- 9. Sai Gurrapu

At University of California, Davis (as a post-doctoral scholar)

PhD Dissertation Mentor

- 1. Zhicheng Yang (PhD, Expected 2019)
- 2. Aveek Das (PhD, 2018)
- 3. Yunze Zeng (PhD, 2018)
- 4. Pengfei Hu (PhD, 2018)
- 5. Arun Raghuramu (PhD, 2018)
- 6. Muchen Wu (PhD, Expected 2019)
- 7. Li Zhang (PhD, 2015)

Masters and Undergraduate Research

1. Chao Xu (MS, 2015)

- 2. Amanda Lins (BS, 2013)
- 3. Andrew Yi (BS, 2014)
- 4. Yumo Rong (BS, 2014)
- 5. Lidan Mu (BS, 2015)
- 6. Jeymisson Oliveira (BS, 2015)

Honors and Awards

- Best Paper Award at IEEE International Conference on Data Science and Advanced Analytics (DSAA) 2019 for work titled "Sign Language Recognition Analysis using Multimodal Data".
- Excellence in Postdoctoral Research at UC Davis Campus-wide award for outstanding postdoctoral research; One of the two recipients of the award for year 2015 selected from 800+ postdocs at UC Davis.
- **Best Paper Award** at IFIP International Networking Conference 2014 for work titled "A First Look at 802.11ac in Action: Energy Efficiency and Interference Characterization".
- **Best Paper Finalist** at ACM BuildSys 2016 Conference for work titled "MotionSync: Personal Energy Analytics through Motion Tags and Wearable Sensing".
- Distinguished member of technical program committee for IEEE Infocom 2020, 2019, 2018 and 2017.
- Best Poster Award at NC State Graduate Student Seminar 2007 for poster titled "Software-defined Cognitive Radio Networks".
- o Research In Motion (RIM) Graduate Research Fellowship 2011, North Carolina State University.
- Research fellowship for 2008-2010 from Army Research Office (ARO), managed by Secure Open Systems Initiative (SOSI) at NC State University.

Service

University, College and Department Service

At George Mason University

- o Computer Science Ph.D. Admissions Committee 2017, 2019, 2020
- o Computer Science MS Admissions Committee 2018, 2019, 2020

Professional Service

- Conference/Workshop Organization
 - Program chair, 3rd ACM Workshop on Millimeter-Wave Networks and Sensing Systems (mmNets) 2019, co-located with ACM MobiCom 2019
 - Publicity chair, IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM) 2014
- Conference/Workshop Technical Program Committee
 - IEEE International Conference on Computer Communications (INFOCOM) 2017-2020
 - ACM International Workshop on Wireless Network Testbeds, Experimental evaluation and CHaracterization (WinTech) 2017, 2019-2020
 - o IEEE International Conference on Mobile Ad-Hoc and Smart Systems (MASS) 2018-2020
 - o IEEE Wireless Communications and Networking Conference (WCNC) 2012-2014, 2016-

2019

- o IEEE International Conference on Computer Communications (INFOCOM) 2018
- ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp) 2018, 2019
- o ACM Workshop on Millimeter Wave Networks and Sensing Systems (mmNets) 2018-2020
- o International Conference on Computer Communications and Networks (ICCCN) 2018-2019
- o IEEE Global Communication Conference (GlobeCom) 2013, 2018, 2019
- IEEE International Symposium on Personal, Indoor and Mobile Radio Communication (PIMRC) 2011-2012

Journal Reviewing

- IEEE Transactions on Mobile Computing (TMC), 2015-2020
- o ACM Transactions on Internet of Things (TIoT) 2020.
- Elsevier Pervasive and Mobile Computing (PMC) 2020.
- IEEE JSAC Special Issue on Millimeter-wave Networking 2019
- ACM Journal on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2017-2019
- IEEE/ACM Transactions on Networking (ToN), 2016-2019
- o IEEE Transactions on Wireless Communications (TWC), 2017, 2019, 2020
- o ACM SIGMOBILE Mobile Computing and Communications Review (MC2R), 2015
- o IEEE Transactions on Vehicular Technology (TVT), 2016
- Elsevier Computer Networks, 2014-2016
- Elsevier Ad-Hoc networks, 2015-2016

Grant Proposal Review

• National Science Foundation (NSF) review panelist 2017-2020.