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RESEARCH INTERESTS

- Wireless Communication and Networking
- Mobile-Cloud Computing
- Multimedia Communication

EDUCATION

- 2/97 – 6/00 **Ph.D., Electrical Engineering and Computer Science**
Massachusetts Institute of Technology, Cambridge, MA
Dissertation: “Application-Specific Protocol Architectures for Wireless Networks”
Advisors: Professor Anantha Chandrakasan and Professor Hari Balakrishnan
- 9/95 – 2/97 **M.S., Electrical Engineering and Computer Science**
Massachusetts Institute of Technology, Cambridge, MA
Dissertation: “Network-Driven Motion Estimation for Wireless Video Terminals”
Advisor: Professor Anantha Chandrakasan
- 9/91 – 5/95 **B.S., Electrical Engineering**
Cornell University, Ithaca, NY

PROFESSIONAL EXPERIENCE

- 7/16– Present **Dean of the Edmund A. Hajim School of Engineering and Applied Sciences**
University of Rochester, Rochester, NY
- 4/12–Present **Professor of Electrical and Computer Engineering**
Professor of Computer Science
University of Rochester, Rochester, NY
- 7/08–6/16 **Dean of Graduate Studies for Arts, Sciences and Engineering**
University of Rochester, Rochester, NY
- 5/06–4/12 **Associate Professor of Electrical and Computer Engineering**
Associate Professor of Computer Science
University of Rochester, Rochester, NY
- 2/08 – 5/08 **Visiting Erskine Fellow**
Department of Computer Science and Software Engineering
University of Canterbury, Christchurch, New Zealand

- 1/01 – 5/06 **Assistant Professor of Electrical and Computer Engineering**
Assistant Professor of Computer Science
University of Rochester, Rochester, NY
- 6/00 – 8/00 **Consultant, Eastman Kodak Company, Rochester, NY**
 Looked into new uses for image and video cameras in wireless sensor networks.
- 9/95 – 6/00 **Research and Teaching Assistant, EECS Department, MIT, Cambridge, MA**
 Researched low power protocols for sensor and multimedia communication networks. Assisted in teaching Digital Signal Processing course.
- 6/98 – 8/98 **Research Intern, Media Tech. Laboratory, Texas Instruments Inc., Dallas, TX**
 Researched the use of unequal error protection for MPEG-4 compressed video sent over a GSM channel. Used rate-compatible punctured convolutional codes to achieve different error correction capabilities with minimal overhead complexity.
- 6/97 – 8/97 **Research Intern, Video Research Group, PictureTel Corporation, Andover, MA**
 Developed low computation face-tracking algorithms to enhance LimeLight audio-tracking camera system for a video teleconferencing application.
- 6/95 – 8/95 **Research Intern, Signal Proc. Research Group, AT&T Bell Labs, Murray Hill, NJ**
 Worked on motion-adaptive modeling of scene content for very low bit rate coding of video. Developed advanced algorithms for tracking faces/people in video sequences. These algorithms were used as a pre-processor for a model-assisted video coder.

HONORS AND AWARDS

- Elected to ACM Fellow (2019)
- Digital Rochester Technology Woman of the Year Nominee (2018)
- Athena Award Finalist (2018)
- Elected to IEEE Fellow (2016)
- IEEE Region 1 Outstanding Teaching in an IEEE Area of Interest Award (2016)
- Distinguished Member of the 2016 IEEE INFOCOM Technical Program Committee
- Best paper award, IEEE International Conference on Communications (2013)
- Named ACM Distinguished Scientist (2012)
- Outstanding contribution to the University of Rochester Center for Emerging and Innovative Sciences New York State Economic Impact for 2010-2011
- Elected to ACM Senior Member (2009)
- Visiting Erskine Fellowship, University of Canterbury, Christchurch, NZ (2008)
- Elected to IEEE Senior Member (2006)
- NSF CAREER award (2005)
- ONR Young Investigator award (2005)
- G. Graydon Curtis '58 and Jane W. Curtis Award for Excellence in Teaching for a Nontenured Member of the Faculty (2003)
- Best paper award, 6th ACM International Workshop on Modeling, Analysis and Simulation of Wireless and Mobile Systems (2003)
- Eastman Kodak Company Fellow (1998-2000)
- National Science Foundation Fellow (1995-1998)

- Sigma Xi Scientific Research Society (inducted in 1997)
- Merrill Presidential Scholar, Cornell University (1995)
- Tau Beta Pi Honor Society (inducted in 1994)
- Eta Kappa Nu Honor Society (inducted in 1994)
- John McMullen Dean's Scholar, Cornell University (1991)

CURRENT COMMITTEES

- Member, Public Policy Committee (PPC) of the American Society for Engineering Education (ASEE) Engineering Deans Council (EDC), 2019-2021
- Member, Cornell ECE Advisory Council, 2017 – Present
- Member, Laboratory for Laser Energetics Trustees Visiting Committee, University of Rochester, 2018 – Present
- Chair, IEEE Communications Society Emerging Technologies Committee, 2019 – Present
- Co-founder and current steering committee member, N² Women (Networking Networking Women), a discipline-specific community supported by ACM, IEEE, Microsoft Research and HP Labs, 2006 – Present (co-leader 2006-2016)

COURSES DEVELOPED

- Wireless Communications, ECE 245/445, University of Rochester (senior/graduate) S06 (9 students), S07 (25 students), F11 (9 students), F12 (21 students), F13 (16 students), F14 (14 students), F15 (18 students)
- Wireless Sensor Networks, ECE 448 (was 492A), University of Rochester (graduate) F09 (16 students), F10 (4 students)
- Wireless Sensor Networks, University of Canterbury (graduate) S08 (4 students)
- Advanced Topics in Wireless Networking, ECE 595, University of Rochester (graduate) S05 (9 students)
- Digital Signal Processing, ECE 246/446, University of Rochester (senior/graduate) F01 (27 students), F02 (23 students), F03 (40 students), F04 (28 students), F06 (48 students), F07 (35 students)
- Wireless Communications, ECE 237/437, University of Rochester (senior/graduate) S01 (10 students), S02 (15 students), S03 (20 students), S04 (24 students)

FUNDING HISTORY

- *Development and Evaluation of an Evidence-Based Mobile Health Caregiver Intervention for FASD*
PIs: Christie Petrenko (UR) and Cristiano Tapparello (UR)
Co-PIs: Wendi Heinzelman (UR), Zhiyao Duan (UR) and Elizabeth Handley
NIH U01, \$1,570,485, 07/01/17 – 06/30/22
- *Support for Distributed Computing and Network Management in Mobile Ad Hoc Networks*
PI: Wendi Heinzelman (UR)
Co-PI: Cristiano Tapparello (UR)
Data Science Center of Excellence, \$69,377, 7/1/19 – 6/30/20
- *REU SITE: Advancing Human Health, from Nano to Network*
PI: Beth Olivares (UR)
Co-PI: Wendi Heinzelman (UR)

NSF, \$372,724, 02/01/17 – 01/31/20

- *INCLUDES: Redefining Potential: The Upstate NY Alliance for Diverse Student Populations*
PI: Beth Olivares (UR)
Co-PI: Wendi Heinzelman (UR)
NSF, \$300,000, 10/1/16-9/30/19
- *Enhancing Voice Biometric Identification in Noisy Environments*
PI: Wendi Heinzelman (UR)
Co-PI: Zhiyao Duan (UR)
Voice Biometrics Group (VBG), \$54,000, 9/1/16-8/31/19
- *Support for Distributed Computing and Network Management in Mobile Ad Hoc Networks*
PI: Wendi Heinzelman (UR)
Harris Corporation/NYSTAR, \$280,056, 7/1/14 – 6/30/18
- *The CIRTl Network: 25 Research Universities Preparing a National Faculty to Advance STEM Undergraduate Learning*
PI: Robert Mathieu (U. Wisconsin)
Subcontract to UR
NSF, \$161,175, 08/15/13 – 07/31/17
- *The CIRTl Network Great Lakes*
PI: Robert Mathieu (U. Wisconsin)
Subcontract to UR
Great Lakes Consortium Foundation, \$129,300, 09/01/14 – 08/31/17
- *CPS: Synergy: Self-Sustainable Data-Driven Systems In the Field*
PI: Kai Shen (UR)
Co-PIs: Wendi Heinzelman (UR), Gaurav Sharma (UR), Tolga Soyata (UR)
NSF CCF, \$800,000, 9/1/12 – 8/31/16
- *GENIUS: Green sEnsor Networks for air qUality Support*
PI: Kaushik Chowdry (Northeastern University)
Co-PI: Wendi Heinzelman (UR), Stefano Basagni (Northeastern University)
NSF CISE, \$299,995, 01/01/12 – 04/30/15
NSF CISE, \$35,000 supplemental funding
 - REU Supplement, \$7,500, 6/1/13–8/31/13
 - REU Supplement, \$6,000, 6/1/14-8/31/14
- *Emotional Processes in Families: New Methods Capturing Multiple Levels of Analysis*
PI: Melissa Sturge-Apple (UR), Mark Bocko (UR), Patrick Davies (UR), Wendi Heinzelman (UR), Zeljko Ignjatovic (UR), Spenser Rosario (UR Medical Center)
NIH, \$2,476,879, 7/1/10 – 6/30/15
- *Distributed-Cloud Computing to Support Computationally Complex Bio-Applications and Application of Communication Theories in Protein Structure Prediction*
PI: Wendi Heinzelman (UR)
UCB Corporation, \$70,000, 7/1/13–6/30/15
- *Support for Distributed Computing and Network Management in Mobile Ad Hoc Networks using a Cloudlet Approach*
PI: Wendi Heinzelman (UR)
Harris Corporation/NYSTAR, \$65,241, 7/1/13–6/30/14

- *Application of Communication Theories in Protein Structure Prediction*
PI: Wendi Heinzelman (UR)
UCB Corporation/NYSTAR, \$187,604, 10/1/11–6/30/13
- *Distributed-Cloud Computing to Support Computationally Complex Bio-Applications*
PI: Wendi Heinzelman (UR)
UCB Corporation/NYSTAR, \$90,680, 7/1/12–6/30/13
- *Protocol Architectures for Multimedia Radios*
PI: Wendi Heinzelman (UR)
Harris Corporation/NYSTAR, \$601,253, 3/1/02–6/30/13
- *Dynamical Systems Tools: Modeling Multi-level Processes in Parent-child Relations*
PI: Melissa Sturge-Apple (UR)
Co-PIs: Wendi Heinzelman (UR), Zeljko Ignjatovic (UR), Fred Rogosch (UR)
NIH Applications, \$1,190,373, 9/1/07–8/31/12
- *RFID Systems for Inventory Management*
PI: Wendi Heinzelman (UR)
Omni-ID Corporation/NYSTAR, \$94,611, 1/1/11–12/31/11
- *CAREER: Cross-layer Design for Sensor Management in Wireless Sensor Networks*
PI: Wendi Heinzelman (UR)
NSF CISE, \$401,486, 2/1/05–1/31/11
 - REU Supplement, \$12,000, 6/1/07–8/31/07
 - REU Supplement, \$6,000, 6/1/10–8/31/10
- *“Being There”: User-centric Wireless Image-based Sensor Networks*
PI: Wendi Heinzelman (UR)
Co-PIs: Mark Bocko (UR), Zeljko Ignjatovic (UR), Gaurav Sharma (UR)
NSF ECCS SENSORS Program, \$1.2M, 9/1/04–8/31/10
 - REU Supplement, \$6000, 6/1/07–8/31/07
- *Balancing Resource Utilization in Wireless Sensor Networks*
PI: Wendi Heinzelman (UR)
ONR Young Investigator Program, \$308,088, 6/1/05-9/1/09
- *Smart Document Systems*
PI: Wendi Heinzelman (UR)
Xerox Corporation/NYSTAR, \$60,000, 7/1/04–6/30/06
- *Architecture for a Smart Medical Home Sensor / Actuator Network*
PI: Wendi Heinzelman (UR)
Co-PI: Amy Murphy (UR, currently at the Bruno Kessler Foundation, Trento, Italy)
Center for Future Health, \$30,000, 3/15/02–9/30/03
- *Resource Sharing in a Mobile Ad-Hoc Network*
PI: Wendi Heinzelman (UR)
Xerox Corporation/NYSTAR, \$56,317, 7/1/02–6/30/03
- *Energy-Efficient Computation and Communication in Wireless Devices*
PI: David Albonesi (UR, currently at Cornell)
Co-PIs: Sandhya Dwarkadas (UR), Wendi Heinzelman (UR)
DARPA, \$2,699,845, 3/1/02–12/31/02
- *Pictosophy: Research on Interconnected Sensors and Multimedia (PRISM)*

PI: Wendi Heinzelman (UR)
Eastman Kodak Company/NYSTAR, \$51,000, 6/1/01–5/31/02

INVITED PRESENTATIONS

- “Panel: Teaching Computing in Science and Engineering,” MIT Celebration of the Stephen A. Schwarzman College of Computing, February 2019.
- “Intersections: Approaches to Cross-Disciplinary Research and Education in the Hajim School of Engineering & Applied Sciences,” The Rochester Forum, June 2018.
- “Wireless Sensor Networks in the Age of Big Data,” Keynote Lecture, IEEE International Conference on Distributed Computing in Sensor Systems, June 2018.
- “Inspiring the next generation of women leaders to make the world ever better,” Chatterbox Club Speaker, January 2018.
- “Inspiring the next generation of leaders to make the world ever better,” 2017 AI and Caryn Bunshaft Lecture in the College of Engineering and Applied Sciences, University at Albany, November 2017.
- “Reducing the Energy Footprint for Wireless and Mobile Communication Systems,” Department of Computer Science Distinguished Lecture Series, University at Buffalo, Buffalo, NY, February 2017.
- “Reducing the Energy Footprint for Wireless and Mobile Communication Systems,” Department of Computer Science, University of Ghana, Accra, Ghana, March 2015.
- “Reducing the Energy Footprint for Wireless and Mobile Communication Systems,” University of Rochester Laboratory for Laser Energetics (LLE), September 2014.
- “Sleeping Techniques for Lifetime Extension in Wireless Sensor Networks,” Winter 2013 CIS-ECE Distinguished Lecture Series, University of Michigan-Dearborn, March 2013.
- “The Evolution of Clustering Protocols for Mobile Ad Hoc and Wireless Sensor Networks,” Universitat Politècnica de Catalunya, Barcelona, Spain, October 2012.
- “Realizing the Potential of Wireless Sensor Networks Through Improved Energy Management,” *RIT Dean’s Lecture Series*, Rochester Institute of Technology, October 2011.
- “Efficiency in Future Heterogeneous Wireless Networks,” US-Indo PC3 Workshop, New Delhi, India, March 2011.
- “Architectural and Protocol Design for Future Communication Networks,” Hofstra University, New York, NY, October 2010.
- “Adaptability in Wireless Sensor Networks,” University of Buffalo, Buffalo, NY, March 2010.
- “Recent Results and Current Challenges in Wireless Sensor Networks,” *University of Oulu Short Course*, University of Oulu, Oulu, Finland, February 2010.
- “Adaptability in Wireless Sensor Networks,” *Computer Science Colloquium*, ETH Zürich, Zürich, Switzerland, October 2009.
- “Supporting Proactive Application Event Notification to Improve Sensor Network Performance,” *AdHocNets 2009*, September 2009.
- “Wireless Sensor Networks: Connecting the Physical and Virtual Worlds,” *Phelps Colloquium Series*, University of Rochester, March 2009.
- “Wireless Sensor Networks: Past, Present and Future,” *RIT Distinguished Lecture Series*, Rochester Institute of Technology, December 2008.
- “Cross-layer Information Sharing Architectures to Support Adaptive Security,” *3rd Annual Women’s Institute in Summer Enrichment (WISE)*, Team for Ubiquitous Secure Technology (TRUST), Cornell University, June 2008.

- “Securing Sensor Networks,” *3rd Annual Women’s Institute in Summer Enrichment (WISE)*, Team for Ubiquitous Secure Technology (TRUST), Cornell University, June 2008.
- “Application and Network Aware Wireless Sensor Networks,” *Computer Science/ Information Science Seminar*, University of Otago, Dunedin, New Zealand, May 2008.
- “Introduction to Wireless Sensor Networks,” *Wireless Networking Course*, University of Otago, Dunedin, New Zealand, May 2008.
- “Wireless Sensor Networks,” *Computer Science and Software Engineering Seminar Series*, University of Canterbury, Christchurch, New Zealand, May 2008.
- “Wireless Sensor Networks: Past, Present and Future,” *IEEE NZ Communications Society Chapter Sponsored Lecture*, Christchurch, New Zealand, April 2008.
- “Wireless Sensor Networks: Key Concepts and Innovations, Practical Implementation Issues,” *Electronics South and NZi3 Sensor Network Workshop*, Christchurch, New Zealand, April 2008.
- “Application- and Network-aware Architectures for Wireless Sensor Networks,” *Toronto Networking Seminar Series*, University of Toronto, March 2007.
- “Application- and Network-aware Architectures for Wireless Sensor Networks,” *ECE Colloquium*, Syracuse University, January 2007.
- “Wireless Sensor Networks: an Overview,” *MITACS Summer School in Wireless Sensor Networks, associated with the 5th International Conference on Ad-Hoc Networks and Wireless*, August 2006.
- “Managing Resource Utilization in Wireless Sensor Networks,” *IEEE Joint Chapters Meeting, Communications and Aerospace Society*, March 2006.
- “Cross-layer Techniques for Sensor Management in Wireless Sensor Networks,” *ECE Seminar*, Boston University, Nov. 2004.
- “Cross-layer Techniques for Sensor Management in Wireless Sensor Networks,” *ECE Seminar*, University of California, Davis, Oct. 2004.
- “Quality of Service for Ad Hoc and Sensor Networks,” *ASWN ’04 Panel: Advances in Wireless Networks, Applications and Services: Current Status, Future Trends and Challenges*, Aug. 2004.
- “Providing Application QoS through Intelligent Network Management,” *ECE Seminar*, Carnegie-Mellon University, Jan. 2003.
- “Protocols for Local Data Delivery in Wireless Microsensor Networks,” *Midwest Symposium on Circuits and Systems (MWSCAS 2002)*, Tulsa, OK, Aug. 2002.
- “Protocol Architectures for Low Power Ad Hoc Sensor Networks,” *ECE Colloquium*, Syracuse University, April 2002.
- “Enabling Technologies for a Smart Medical Home,” *IEEE Joint Chapters Meeting, Biomedical Engineering Society*, April 2002
- “Protocol Architectures for Low Power Ad Hoc Sensor Networks,” *ECE Colloquium*, Notre Dame, Jan. 2002
- “Protocol Architectures for Low Power Ad Hoc Sensor Networks,” *RIT Colloquium*, Rochester Institute of Technology, Jan. 2002.

PATENTS

- W. Heinzelman, H. Ba and L. Chen, “Wireless Sensor Network Wake-Up Range Extension Via Energy Harvesting and Edge Devices,” US Patent Number 9,232,475 B2, January, 2016.
- B. Tavli and W. Heinzelman, “TRACE: Time Reservations Using Adaptive Control for Energy Efficiency,” US Patent Number 7,764,706 B2, July 2010.

- B. Tavli and W. Heinzelman, "Multi-Hop Time Reservation Using Adaptive Control for Energy Efficiency," US Patent Number 7,411,919 B2, August 2008.
- B. Tavli and W. Heinzelman, "Multi-Hop Time Reservation Using Adaptive Control for Energy Efficiency," British Patent Number 2,416,096, October 2006.
- H. Balakrishnan, A. Chandrakasan and W. Heinzelman, "Method for Low-Energy Adaptive Clustering Hierarchy," US Patent Number 7,035,240, April 2006.
- W. Heinzelman, R. Talluri and M. Budagavi, "Error Protection for Compressed Video," US Patent Number 6,754,277, June 2004.
- S. Potts, H. Wang, W. Rabiner and P. Chu, "Locating an Audio Source," US Patent Number 6,593,956, July 2003.
- A. Jacquin and W. Rabiner, "Motion-Adaptive Modeling of Scene Content for Very Low Bit Rate Model-Assisted Coding of Video Sequences," US Patent Number 5,764,803, June 1998.

BOOKS AND BOOK CHAPTERS

1. "Volunteer Computing on Mobile Devices: State of the Art and Future Research Directions," by C. Tapparello, C. Funai, S. Hijazi, A. Aquino, B. Karaoglu, H. Ba, W. Heinzelman and J. Shi. In *Enabling Real-Time Mobile Cloud Computing through Emerging Technologies*, IGI Global, 2015.
2. "Energy Efficient Real-time Distributed Communication Architectures for Military Tactical Communication Systems," by B. Karaoglu, T. Numanoglu, B. Tavli and W. Heinzelman. In *Enabling Real-Time Mobile Cloud Computing through Emerging Technologies*, IGI Global, 2015.
3. "Accelerating Mobile-Cloud Computing: A Survey," by T. Soyata, H. Ba, W. Heinzelman, M. Kwon, and Jiye Shi. In *Communication Infrastructures for Cloud Computing: Design and Applications*, IGI Global, 2013.
4. "Sleeping Techniques for Reducing Energy Dissipation," by R. Muraleedharan, H. Ba, S. Ray, O. Yang, I. Demirkol and W. Heinzelman. In *The Art of Wireless Sensor Networks*, Springer Publishers, 2013.
5. "Passive RFID-based Wake-up Radios for Wireless Sensor Networks," by H. Ba, J. Parvin, L. Soto, I. Demirkol, and W. Heinzelman. In *Wirelessly powered sensor networks and computational RFID*, Springer Publishers, 2013.
6. *Resource Management Policies for Wireless and Visual Sensor Networks*, S. Soro and W. Heinzelman, VDM Publishing House, 2008.
7. *Protocols for Supporting QoS in Mobile Ad Hoc Networks*, L. Chen and W. Heinzelman, VDM Publishing House, 2008.
8. *Mobile Ad Hoc Networks: Energy-Efficient Real-Time Data Communications*, B. Tavli and W. Heinzelman, Springer Publishers, 2006.
9. "Storage Management in Wireless Sensor Networks" by S. Tilak, N. Abu-Ghazaleh and W. Heinzelman. In *Mobile, Wireless and Sensor Networks: Technology, Applications, and Future Directions*, Wiley Publishers, 2006.
10. "Wireless Sensor Network Protocols" by M. Perillo and W. Heinzelman. In *Fundamental Algorithms and Protocols for Wireless and Mobile Networks*, CRC Hall, 2005.

11. "Data- and Event-Centric Communication" by W. Heinzelman, A. Murphy and M. Perillo. In *Wireless Sensor Networks: A Systems Perspective*, Artech House, 2005.
12. "Sensor Management" by M. Perillo and W. Heinzelman. In *Wireless Sensor Networks*, Kluwer Academic Publishers, 2004.
13. "Future Directions in Energy Efficient Computing" by A. Chandrakasan, R. Amirtharajah, A. Dancy, J. Goodman, W. Rabiner and T. Xanthopoulos. In *Low-Power, High-Speed ULSI Circuits and Technology*, Realize Inc., Japan, 1998.

JOURNAL PUBLICATIONS

1. C. Funai, C. Tapparello and W. Heinzelman, "Computational Offloading for Energy Constrained Devices in Multi-hop Cooperative Networks," *accepted for publication in IEEE Transactions on Mobile Computing*, 2019. On page(s): 1--1 Print ISSN: 1536-1233 Online ISSN: 1536-1233 Digital Object Identifier: 10.1109/TMC.2019.2892100
2. H. Ayatollahi, C. Tapparello and W. Heinzelman, "MAC-LEAP: Multi-Antenna, Cross Layer, Energy Adaptive Protocol," *Elsevier Ad Hoc Networks Journal*, Volume 83, February 2019, Pages 91-110, <https://doi.org/10.1016/j.adhoc.2018.09.005>.
3. Eskimez, P. Soufleris, Z. Duan and W. Heinzelman, "Front-end Speech Enhancement for Commercial Speaker Verification Systems," *Elsevier Journal of Speech Communication Special Issue on Realism in Robust Speech and Language Processing*, Volume 99, May 2018, Pages 101-113, <https://doi.org/10.1016/j.specom.2018.03.008>.
4. K. Sarpong Adu-Manu, N. Adam, C. Tapparello, H. Ayatollahi and W. Heinzelman, "Energy-Harvesting Wireless Sensor Networks (EH-WSNs): A Review," *ACM Transactions on Sensor Networks*, 2018, Volume 14 Issue 2, July 2018, DOI 10.1145/3183338.
5. K. Sarpong Adu-Manu, C. Tapparello, W. Heinzelman, F. Apietu Katsriku, J.-D. Abdulai, "Water Quality Monitoring Using Wireless Sensor Networks: Current Trends and Future Research Directions," *ACM Transactions on Sensor Networks*, Volume 13, Issue 1, February 2017, DOI 10.1145/3005719.
6. N. Yang, J. Yuan, Y. Zhou, I. Demirkol, Z. Duan, W. Heinzelman and M. Sturge-Apple, "Enhanced Multiclass SVM with Thresholding Fusion for Speech-based Emotion Classification," *International Journal of Speech Technology*, January 2017, DOI 10.1007/s10772-016-9364-2.
7. K. Kaushik, D. Mishra, S. De, K. Chowdhury, and W. Heinzelman, "Low-cost Wake-up Receiver for RF Energy Harvesting Wireless Sensor Networks," *IEEE Sensors Journal*, Vol. 16, No. 16, August 2016, DOI: 10.1109/JSEN.2016.2574798.
8. T. Soyata, L. Copeland and W. Heinzelman, "RF Energy Harvesting for Embedded Systems: A Survey of Tradeoffs and Methodology," *IEEE Circuits and Systems Magazine*, Vol. 16, Number 1, February 2016.
9. L. Chen, W. Heinzelman, J. Warner, P. L. Yung, D. Zhou, I. Demirkol, U. Muncuk, K. Chowdhury, and S. Basagni, "REACH2-Mote: A Range Extending Passive Wake-up Wireless Sensor Node," *ACM Transactions on Sensor Networks*, Vol. 11, Number 4, November 2015.

10. D. Mishra, S. De, S. Jana, S. Basagni, K. Chowdhury, and W. Heinzelman, "Smart RF Energy Harvesting Communications: Challenges and Opportunities," *IEEE Communications Magazine*, Vol. 53, Issue 4, April 2015.
11. B. Karaoglu and W. Heinzelman, "Cooperative Load Balancing and Dynamic Channel Allocation for Cluster-based Mobile Ad Hoc Networks," *IEEE Transactions on Mobile Computing*, Vol. 14, Issue 5, May 2015.
12. N. Yang, H. Ba, W. Cai, I. Demirkol and W. Heinzelman, "BaNa: A Noise Resilient Fundamental Frequency Detection Algorithm for Speech and Music," *IEEE Transactions on Audio, Speech and Language Processing*, Vol. 22, Issue 12, Dec. 2014, pp. 1833 - 1848
13. L. Chen, I. Demirkol and W. Heinzelman, "Token-MAC: Supporting Fair Access in Passive RFID Systems," *IEEE Transactions on Mobile Computing*, Vol. 13, Issue 6, June 2014.
14. H. Ba, I. Demirkol, and W. Heinzelman, "Passive Wake-up Radios: From Devices To Applications," *Elsevier Ad Hoc Networks*, Vol. 11, Issue 8, November, 2013, pages 2605-2621.
15. O. Yang and W. Heinzelman, "An Adaptive Sensor Sleeping Solution Based on Sleeping Multipath Routing and Duty-cycled MAC Protocols," *ACM Transactions on Sensor Networks*, Vol. 10, Issue 1, November 2013.
16. S. Ray, I. Demirkol and W. Heinzelman, "ATMA: MAC Protocol for Energy-efficient Support of Bursty Traffic," *Elsevier Ad Hoc Networks*, Vol. 11, Issue 3, May 2013, pp. 959-974.
17. T. Wang, A. Seyedi, A. Vosoughi and W. Heinzelman, "Optimal Rate Allocation for Distributed Source Coding over Gaussian Multiple Access Channels," *IEEE Transactions on Wireless Communication*, Vol. 12, No. 5, pp. 2002-2013, May 2013.
18. C.-H. Feng, I. Demirkol and W. Heinzelman, "UPS: Universal Protocol Stack for Emerging Wireless Networks," *Elsevier Ad Hoc Networks Special Issue on Cross-layer Design in Ad Hoc and Sensor Networks*, Vol. 11, 2013, pp. 687-700.
<http://dx.doi.org/10.1016/j.adhoc.2011.07.013>
19. O. Yang and W. Heinzelman, "Modeling and Performance Analysis for Duty-cycled MAC Protocols in Wireless Sensor Networks," *IEEE Transactions on Mobile Computing*, Vol. 11, No. 6, June 2012.
20. T. Wang, W. Heinzelman and A. Seyedi, "Link Energy Minimization for Wireless Sensor Networks," *Elsevier Ad Hoc Networks*, Vol. 10, No. 3, pp. 569-585, May 2012.
21. R. Cheng, W. Heinzelman, M. Sturge-Apple, and Z. Ignjatovic, "A Motion-Tracking Ultrasonic Sensor Array for Behavioral Monitoring," *IEEE Sensors Journal*, vol. 12, No. 3, pp. 707-712, March 2012. [11th most downloaded paper for IEEE Sensors Journal, Sept. 2012]
22. T. Wang, W. Heinzelman, A. Seyedi and A. Vosoughi, "Maximizing Gathered Samples in Wireless Sensor Networks with Slepian-Wolf Coding," *IEEE Transactions on Wireless Communication*, Vol. 11, No. 2, pp. 751-761, Feb. 2012.

23. C.-H. Feng, Y. Zhang, I. Demirkol and W. Heinzelman, "Stateless Multicast Protocol for Ad Hoc Networks," *IEEE Transactions on Mobile Computing*, Vol. 11, No. 2, pp. 240-253, Feb. 2012.
24. M. Sturge-Apple, M. Skibo, F. Rogosch, Z. Ignjatovic, and W. Heinzelman, "The Impact of Allostatic Load on Maternal Sympathovagal Functioning in Stressful Child Contexts: Implications for Maladaptive Parenting," *Development and Psychopathology*, Vol. 23, No. 3, pp. 831-844, 2011.
25. M. Holland, T. Wang, B. Tavli, A. Seyedi and W. Heinzelman, "Optimizing Physical Layer Parameters for Wireless Sensor Networks," *ACM Transactions on Sensor Networks*, Vol. 7, No. 4, Nov. 2011.
26. S. Ray, I. Demirkol and W. Heinzelman, "ADV-MAC: Analysis and Optimization of Energy Efficiency through Advertisements for Wireless Sensor Networks," *Elsevier Ad Hoc Networks Journal*, Vol. 9, No. 5, July 2011, pp. 876-892.
27. B. Karaoglu, T. Numanoglu and W. Heinzelman, "Analytical Performance of Soft Clustering Protocols," *Elsevier Ad Hoc Networks Special Issue on Multimedia Ad Hoc and Sensor Networks*, Vol. 9, No. 4, June 2011, pp. 635-651.
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101. S. Tilak, A. Murphy and W. Heinzelman, "Non-Uniform Information Dissemination for Sensor Networks," *Proceedings of the International Conference on Network Protocols (ICNP '03)*, Nov. 2003.
102. L. Chen and W. Heinzelman, "End-to-End Congestion Control for Best-effort Transmission," *Proceedings of the WNCG Wireless Networking Symposium*, Oct. 2003.
103. B. Tavli and W. Heinzelman, "MH-TRACE: Multi-Hop Time Reservation Using Adaptive Control For Energy Efficiency," *Proceedings of IEEE Milcom '03*, Oct. 2003.
104. Z. Cheng and W. Heinzelman, "Flooding Strategy for Target Discovery in Wireless Networks," *Sixth ACM International Workshop on Modeling, Analysis and Simulation of Wireless and Mobile Systems*, Sept. 2003. [Best Paper Award]
105. H. Carvalho, W. Heinzelman, A. Murphy and C. Coelho, "A General Data Fusion Architecture," *Proceedings of the 6th International Conference on Information Fusion (Fusion 2003)*, July 2003.
106. G. Caner, M. Tekalp and W. Heinzelman, "Super Resolution Recovery for Multi-Camera Surveillance Imaging," *Proceedings of the 2003 IEEE International Conference on Multimedia & Expo*, July 2003.
107. H. Carvalho, A. Murphy, W. Heinzelman, and C. Coelho, "Network-Based Distributed Systems Middleware," *Proceedings of the 1st International Workshop on Middleware for Pervasive and Ad-Hoc Computing*, June 2003.
108. M. Perillo and W. Heinzelman, "Providing Application QoS Through Intelligent Sensor Management," *Proceedings of the 1st IEEE International Workshop on Sensor Network Protocols and Applications (SNPA '03)*, May 2003.
109. M. Perillo and W. Heinzelman, "Optimal Sensor Management Under Energy and Reliability Constraints," *Proceedings of the IEEE Wireless Communications and Networking Conference (WCNC '03)*, March 2003.
110. M. Perillo and W. Heinzelman, "ASP: An Adaptive Energy-Efficient Polling Algorithm for Bluetooth Piconets," *Proceedings of the 36th International Conference on System Sciences (HICSS '03)*, January 2003.
111. G. Caner, A. M. Tekalp and W. Heinzelman, "Performance Evaluation of Super-Resolution Reconstruction from Video," *Proceedings of the IS&T/SPIE's 15th Annual Symposium on Electronic Imaging*, January 2003.
112. S. Tilak, N. Abu-Ghazaleh and W. Heinzelman, "Infrastructure Tradeoffs for Sensor Networks," *ACM 1st International Workshop on Sensor Networks and Applications (WSNA '02)*, Sept. 2002.

113. E. Woodrow and W. Heinzelman, "SPIN-IT: A Data Centric Routing Protocol for Image Retrieval in Wireless Networks," *Proc. International Conference on Image Processing (ICIP '02)*, Sept. 2002.
114. Z. Cheng, M. Perillo, B. Tavli, W. Heinzelman, S. Tilak, and N. Abu-Ghazaleh, "Protocols for Local Data Delivery in Wireless Microsensor Networks," *45th IEEE Midwest Symp. on Circuits and Systems (MWSCAS '02)*, Tulsa, OK, Aug. 2002. (Invited)
115. W. Rabiner Heinzelman, A. Sinha, A. Wang, and A. Chandrakasan, "Energy-Scalable Algorithms and Protocols for Wireless Microsensor Networks," *Proceedings of the International Conference on Acoustic, Speech, and Signal Processing (ICASSP '00)*, June 2000.
116. W. Rabiner Heinzelman, A. Chandrakasan, and H. Balakrishnan, "Energy-Efficient Communication Protocol for Wireless Microsensor Networks," *Proceedings of the 33rd Hawaii International Conference on System Sciences (HICSS '00)*, January 2000.
117. W. Rabiner Heinzelman, M. Budagavi, and R. Talluri, "Unequal Error Protection of MPEG-4 Compressed Video," *Proceedings of the International Conference on Image Processing (ICIP '99)*, October 1999.
118. A. Wang, W. Rabiner Heinzelman, and A. Chandrakasan, "Energy-Scalable Protocols for Battery-Operated Microsensor Networks," *Proceedings of the Signal Processing Systems (SiPS '99)*, October 1999, pp. 483-492.
119. W. Rabiner Heinzelman, J. Kulik, and H. Balakrishnan, "Adaptive Protocols for Information Dissemination in Wireless Sensor Networks," *Proceedings of the Fifth Annual ACM/IEEE International Conference on Mobile Computing and Networking (MobiCom '99)*, August 1999, pp. 174-185.
120. A. Chandrakasan, R. Amirtharajah, S.H. Cho, J. Goodman, G. Konduri, J. Kulik, W. Rabiner, and A. Wang, "Design Considerations for Distributed Microsensor Systems," *Proceedings IEEE 1999 Custom Integrated Circuits Conference (CICC '99)*, May 1999, pp. 279-286.
121. M. Budagavi, W. Rabiner, J. Webb, and R. Talluri, "Wireless MPEG-4 Video on Texas Instruments DSP Chips," *Proceedings International Conference on Acoustics, Speech, and Signal Processing (ICASSP '99)*, March 1999, Vol. 4, pp. 2223-2226.
122. A. Chandrakasan, R. Amirtharajah, J. Goodman, and W. Rabiner, "Trends in Low Power Digital Signal Processing," *1998 IEEE International Symposium on Circuits and Systems*, 1998, Vol. 4, pp. 604-607.
123. W. Rabiner and A. Chandrakasan, "Network-Driven Motion Estimation for Portable Video Terminals," *Proceedings International Conference on Acoustics, Speech, and Signal Processing (ICASSP '97)*, April 1997, Vol. 4, pp. 2865-2868.
124. W. Rabiner and A. Jacquin, "Object Tracking Using Motion-Adaptive Modeling of Scene Content," *Proc. Globecom '96*, November 1996, Vol. 2, pp. 877-881.

125. A. Chandrakasan, T. Simon, J. Goodman, and W. Rabiner, "Signal Processing for an Ultra Low Power Wireless Video Camera," *3rd International Workshop on Mobile Multimedia Communications (MoMuC '96)*, September 1996.

THESES

1. W. Rabiner Heinzelman, "Application-Specific Protocol Architectures for Wireless Networks," Massachusetts Institute of Technology, Ph.D. Dissertation, June 2000.
2. W. Rabiner, "Network-Driven Motion Estimation for Wireless Video Terminals," Massachusetts Institute of Technology, M.S. Dissertation, February 1997.

POPULAR PRESS

1. Democrat and Chronicle, Women to Watch Profile,
http://her.democratandchronicle.com/article/20130925/WOMEN_TO_WATCH01/30925044/-1/women_to_watch

CITATIONS

- H-index = 52 (per Google Scholar, December 2019)
- Articles cited over 49,000 times (per Google Scholar, December 2019)
- In top 2000 of most cited authors in Computer Science (per CiteSeer^x)
- Articles in top 10 (in 2000), top 30 (in 2002) and top 60 (in 1999) most cited articles in Computer Science (per CiteSeer^x)
- Article that is the 152nd top cited article in Computer Science (per CiteSeer^x)

POST-DOCTORAL TRAINEES

- Cristiano Tapparelo, 2013 – 2017
Current Position: Research Assistant Professor, University of Rochester, NY
- Rajani Muraleedharan, 2011 – 2012
Current Position: Associate Professor, Saginaw Valley State University, MI
Past Position: Lecturer, Rowan University, NJ, USA
- Ilker Demirkol, 2008 – 2011
Current Position: Universitat Politècnica de Catalunya, i2CAT Foundation
- Bulent Tavli, 2005 – 2006
Current Position: Associate Professor, Computer Engineering Department, TOBB Economy and Technology University, Turkey
Past position: Assistant Professor, Computer Engineering Department, TOBB Economy and Technology University, Turkey

PRESENT STUDENTS

- Nadir Adam, 5th year Ph.D. student
- Utku Demir, 5th year Ph.D. student
- Kofi Adu-manu, University of Ghana (former visiting Ph.D. student at UR)
- Veerendra Balchand, B.S., University of Rochester, 2020
- Kapambwe Chalwe, B.S., University of Rochester, 2020
- George Klimianshvili, B.S., University of Rochester, 2020

VISITING FACULTY

- Malitha Wijesundara, Sri Lanka Institute of Information Technology, 2015-2016

PAST PH.D. STUDENTS

- Sefik Emre Eskimez, Ph.D., University of Rochester, 2019
Thesis: “Robust Techniques for Generating Talking Faces from Speech”
Current position: Researcher, Microsoft Research, Seattle, WA
- Hoda Sadat Ayatollahi Tabatabaei, Ph.D., University of Rochester, 2018
Thesis: “Energy Balancing in Wireless Networks with MIMO Communications”
Current position: Post-doc, Iran
- Colin Funai, Ph.D., University of Rochester, 2017
Thesis: “Enabling and Optimizing Resource Constrained Ad-Hoc Mobile Clouds”
Current position: Software Engineer, Harris Corporation, Rochester, NY
- Ovunc Kocabas, Ph.D., University of Rochester, 2016
Secondary Advisor (Tolga Soyata, Primary Advisor)
Thesis: “Design and Analysis of Privacy-Preserving Medical Cloud Computing Systems”
Current position: Data Scientist for Alexa Team, Amazon, Boston, MA
- Li Chen, Ph.D., University of Rochester, 2015
Thesis: “Increasing Coverage and Improving Efficiency for RFID Systems and Wireless Sensor Networks” [Commendation in University of Rochester Outstanding Dissertation Award Competition in Engineering]
Current position: System Design Engineer, Apple, Cupertino, CA
- Na Yang, Ph.D., University of Rochester, 2015
Thesis: “Algorithms for Affective and Ubiquitous Sensing Systems and for Protein Structure Prediction”
Current position: Research Staff Member, Dell Research Labs, Santa Clara, CA
- He Ba, Ph.D., University of Rochester, 2015
Thesis: “Enabling Energy Efficient Sensing and Computing Systems”
Current position: Facebook, Seattle, WA
Past position: Software Engineer in Big Data, KPMG, New York, NY
- Bora Karaoglu, Ph.D., University of Rochester, 2014
Thesis: “Efficient Use of Resources in Mobile Ad Hoc Networks”
Current position: Wireless Networking Researcher, Samraksh Company, Leesburg, VA
- Surjya Ray, Ph.D., University of Rochester, 2013
Thesis: “Advertisement-Based Energy Efficient Medium Access Protocols for Wireless Sensor Networks”
Current position: Autonomous Driving and Tools Engineer, Ford Palo Alto Research and Innovation Center, Palo Alto, CA
Past position: Chief Software Developer, Overlays, Buffalo, NY
Past position: Post-doctoral Researcher, RIT, Rochester, NY
- Chen-Hsiang Feng, Ph.D., University of Rochester, 2013
Thesis: “Stack Architectures and Protocols for Emerging Wireless Networks”
Past position: Staff Engineer, MAC/Networking Design, Silicon Image, Sunnyvale, CA
Past position: Research Scientist, Mimoso Networks, San Jose, CA

Past position: Research Scientist, Intel Corporation, San Jose, CA

- Tianqi Wang, Ph.D., University of Rochester, 2012
Thesis: "Cross-Layer Design and Optimization of Short Range Wireless Networks"
Current position: Senior System Engineer, Qualcomm, Atheros Division, San Jose, CA
- Ou Yang, Ph.D., University of Rochester, 2011
Thesis: "Sleeping Strategies for Wireless Sensor Networks"
Current position: Intel Corporation
Past position: Staff Engineer, MAC/Networking Design, Silicon Image, Sunnyvale, CA
Past position: Senior Systems Engineer, Assia, Inc, Redwood City, CA
- Tolga Numanoglu, Ph.D., University of Rochester, 2009
Thesis: "Improving Reliability and Performance of Real-Time Communications in Mobile Ad Hoc Networks"
Current position: Research Scientist, Aselsan, Ankara, Turkey
- Christophe Merlin, Ph.D., University of Rochester, 2009
Thesis: "Adaptability in Wireless Sensor Networks Through Cross-Layer Protocols and Architectures"
Current position: Research Scientist, BBN Corporation, Waltham, MA
Past position: Research Scientist, Sentilla Corporation, Redwood City, CA
- Stanislava Soro, Ph.D., University of Rochester, 2008
Thesis: "Application-aware Resource Management in Wireless and Visual Sensor Networks"
Current position: Aerial Communications, MITRE, Bedford, MA
Past position: Communications Researcher, GE Global Research Center, Niskayuna, NY
Past position: Senior Engineer, Advis Corporation, Rochester, NY
- Mark Perillo, Ph.D., University of Rochester, 2008
Thesis: "Role Assignment in Wireless Sensor Networks: Energy-Efficient Strategies and Algorithms"
Current position: Technical Area Manager, Syracuse Research Corporation, Syracuse, NY
Past positions: Research Engineer, Syracuse Research Corporation, Syracuse, NY and Adjunct Lecturer, University of Rochester, Rochester, NY
- Lei Chen, Ph.D., University of Rochester, 2007
Thesis: "Protocols for Supporting Quality of Service in Mobile Ad Hoc Networks"
Past position: Senior Software Engineer, Motorola, Schaumburg, IL
- Zhao Cheng, Ph.D., University of Rochester, 2006
Thesis: "Efficient Information Discovery and Retrieval in Wireless Ad Hoc Networks"
Current position: Chief Financial Officer and Chief Operating Officer, Fisonic Energy Corporation, New York, NY
Past position: AVP, Barclays Capital, New York, NY
- Gulcin Caner, Ph.D., University of Rochester, 2006
Thesis: "Multi-camera Image Processing for Video Surveillance"
Current Position: Imaging Scientist, Altia Systems, Cupertino, CA
Past position: Research Scientist, Polar Rain, Inc., Sunnyvale, CA
- Sameer Tilak, Ph.D., Binghamton University, 2005
Thesis: "Towards a Holistic Approach for Protocol Development in Sensor Networks"

Current Position: Senior Data Scientist, Kaiser Permanente, San Diego, CA
Past Position: Research Scientist, San Diego Supercomputer Center, UCSD

- Bulent Tavli, Ph.D., University of Rochester, 2005
Thesis: "Protocol Architectures for Real-Time Data Communication in Mobile Ad Hoc Networks"
Current position: Associate Professor, Computer Engineering Department, TOBB Economy and Technology University, Turkey
Past position: Assistant Professor, Computer Engineering Department, TOBB Economy and Technology University, Turkey
- Hervaldo Carvalho, Ph.D., Federal University of Minas Gerais, 2005
Thesis: "Data Fusion Implementation in Sensor Networks Applied to Health Monitoring"
Current position: Professor, Department of Cardiology and Department of Biomedical Information, University of Brasilia, Brazil

PAST M.S. THESIS STUDENTS

- Weiyang Cai, M.S., University of Rochester, 2013
Thesis: "Analysis of Acoustic Feature Extraction Algorithms in Noisy Environments"
- Zuochao Duo, M.S., University of Rochester, 2013
Thesis: "Benefits of Utilizing an Edge Server (Cloudlet) in the MOCHA Architecture"
- Yuqun Zhang, M.S., University of Rochester, 2010
Thesis: "Receiver-based Protocol Enhancements for Wireless Ad-Hoc and Sensor Networks"
- Matthew Holland, M.S., University of Rochester, 2007
Thesis: "Optimizing Physical Layer Parameters for Wireless Sensor Networks"
- Colin Goldsmith, M.S., University of Rochester, 2004
Thesis: "Wireless Local Area Networking for Device Monitoring"
- Owen Zacharias, M.S., University of Rochester, 2004
Thesis: "Wireless Wide Area Networking for Device Monitoring"
- Edward Woodrow, M.S., University of Rochester, 2002
Thesis: "Data-centric Routing for Ad Hoc Networks"

PAST B.S. AND M.S. RESEARCH STUDENTS

- Aaron Faulkenberry, B.S., University of Rochester, 2019
- Chinenye Tassie, B.S., University of Rochester, 2019
- Javon Walker, B.S., University of Rochester, 2019
- Tasneem Khan, B.S., University of Rochester, 2019
- Abhinanda Dutta, M.S., University of Rochester, 2018
- Abhishek Singh, M.S., University of Rochester, 2018
- Kwasi Nimako, B.S., University of Rochester, 2018
- Eric Nunez, B.S., University of Rochester, 2018
- Yukun (York) Chen, B.S., University of Rochester, 2018
- Teddy Reiss, B.S., University of Rochester, 2018
- Lauren Kemperman, B.S. Data Science, University of Rochester, 2017
- Jean Chakmakas, B.S. Data Science, University of Rochester, 2017

- Abdulwahab Alhaji, B.S., University of Rochester, 2017
- Yizhe Cheng, B.S., University of Rochester, 2017
- Greg Hunkins, B.S., University of Rochester, 2017
- Jon Aho, B.S., University of Rochester, 2017
- Shibi Liu, B.S. student, B.S., University of Rochester, 2017
- Nancy Vargas, B.S., University of Rochester, 2017
- Ibrahim Akbar, B.S., University of Rochester, 2017
- Justin Fraumeni, B.S., University of Rochester, 2017
- Greg Hunkins, B.S., University of Rochester, 2017
- Megha Modak, M.S., University of Rochester, 2017
- Chelsea Vargas, B.S., University of Rochester, 2017
- Juan Vico Zafra, M.S., University of Rochester, 2016
- Noelia Lopez-Plaza, M.S., University of Rochester, 2016
- Sarafa Ibrahim, M.S., TEAM, University of Rochester, 2016
- TianChi Zhao, M.S., University of Rochester, 2016
- Yuan Xing, M.S., University of Rochester, 2016
- Valentine Ezenwa, B.S., University of Rochester, 2016
- Kenneth Imade, B.S., University of Rochester, 2016
- Abner Aquino, B.S., University of Rochester, 2016
- Shurouq Hijazi, B.S., University of Rochester, 2016
- Carmen Cortez, M.S., University of Rochester, 2016
- Mohammed Ahmed, B.S., University of Rochester, 2015
- Lucian Copeland, B.S., University of Rochester, 2015
- Louise Yi Lu, B.S., CS University of Rochester, 2015
- Kate Zeng Zhiming, B.S., CS University of Rochester, 2015
- Jeremy Warner, B.S., University of Rochester, 2015
- Da Wan, M.S., University of Rochester, 2015
- Fei Xu, M.S., University of Rochester, 2015
- Mathew Hershfield, B.S., University of Rochester, 2015
- Jeremy Warner, B.S., University of Rochester, 2015
- Jingwei Guo, M.S., University of Rochester, 2014
- Binyu Hu, M.S., University of Rochester, 2014
- Wei Liu, M.S., University of Rochester, 2014
- Jianbo Yuan, M.S., University of Rochester, 2014
- Pak Lam (Jack) Yung, M.S., University of Rochester, 2014
- Dawei Zhou, M.S., University of Rochester, 2014
- Yun Zhou, M.S., University of Rochester, 2014
- Michael Nolan, M.S., University of Rochester, 2014
- Kavan Pandya, M.S., University of Rochester, 2014
- Vikram Raghu, M.S., University of Rochester, 2014
- Thomas Horta, Visiting Undergraduate Student from Brazil
- Stephen Cool, B.S., University of Rochester, 2014
- Jinnan Hussain, B.S., University of Rochester, 2013
- JoHannah Kohl, B.S., University of Rochester, 2013
- Andrew Song, B.S., University of Rochester, 2013
- Sara Lickers, B.S., University of Rochester (CS), 2013
- Jeff Kabel, B.S., University of Rochester, 2012
- Colin Funai, B.S., University of Rochester, 2012

- Luis Soto, Xerox Fellow, Summer 2010 (B.S., University of Rochester, 2011)
- Jeff Pravin, REU, Summer 2010 (B.S., University of Pittsburgh, 2011)
- Paul Molta, M.S., University of Rochester, 2010
- Naoum Katsianis, M.S., University of Rochester, 2008
- Sarah Rosenstein, REU, Summer 2007 (B.S., University of Rochester, 2009)
- Jian (Johnny) Chen, Summer 2007 (B.S., University of Rochester, 2008)
- Kyle Aures, REU, Summer 2007, Spring 2009 (B.S./M.S., University of Rochester, 2008/2009)
- Steven Wik, REU, Summer 2007, Spring 2009 (B.S./M.S., University of Rochester, 2008/2009)
- Ryan Aures, M.S., University of Rochester, 2007
- Matjaz Kranz, M.S., University of Rochester, 2006
- Michael Borden, M.S., University of Rochester, 2006

INTERNATIONAL THESIS REVIEWS

- David Benedetti, Ph.D., Department of Computer Science, University of Rome “La Sapienza,” 2015
Thesis: “RFID Tag Identification in Harsh Environments”
- Dora Spenza, Ph.D., Department of Computer Science, University of Rome “La Sapienza,” 2013
Thesis: “Towards Self-Powered Wireless Sensor Networks”
- Ugo Colesanti, Ph.D., Dipartimento di Informatica e Sistemistica of the University of Rome “La Sapienza,” 2011
Thesis: “Information Gathering in Resource Constrained Wireless Networks”
- Jussi-Pekka Haapola, Ph.D., University of Oulu, Oulu, Finland, 2010
Thesis: “Evaluating Medium Access Control Protocols for Wireless Sensor Networks”
- Anuradha Vaidyanathan, Ph.D., U. of Canterbury, Christchurch, New Zealand, 2010
Thesis: “Manikarnika, A framework for Emergency Management”
- Silvia Santini, Ph.D., ETH Zurich, Zurich, Switzerland, 2009
Thesis: “Adaptive Sensor Selection Algorithms for Wireless Sensor Networks”
- Michele Mastrogiovanni, Ph.D., Rome University, La Sapienza, Italy, 2008
Thesis: “Toward Complete Solutions for Terrestrial and Underwater Wireless Sensor Networks”
- Weibo Li, M.S., University of Canterbury, Christchurch, NZ, 2008
Thesis: “An Address-Based Routing Scheme for Static Applications of Wireless Sensor Networks”

PROFESSIONAL ACTIVITIES

- Fellow, IEEE, IEEE Signal Processing Society, IEEE Communications Society
- Fellow, ACM, ACM Sigmobile
- Member, Society of Women Engineers (SWE)

- Co-founder and current steering committee member, N² Women (Networking Networking Women), a discipline-specific community supported by ACM, IEEE, Microsoft Research and HP Labs, 2006 – Present (co-leader 2006-2016)
- Steering Council, Platforms for Advanced Wireless Research (PAWR) program, a \$100M public-private partnership, a joint effort by the National Science Foundation and an Industry Consortium, to design, develop, and deploy up to four city-scale testing platforms to accelerate fundamental research on wireless communication and networking technologies, applications, and services, 2017 – Present
- Steering Committee, IEEE Transactions on Mobile Computing, IEEE Communications Society Representative, 2013 – 2016
- Information Director, *ACM Transactions on Sensor Networks*, 2012 – 2016
- Steering Committee, IEEE Transactions on Mobile Computing, IEEE Signal Processing Society Representative, 2010 – 2012
- Editorships
 - Associate Editor, *Elsevier Ad Hoc Networks Journal*, 2010 – 2016
 - Associate Editor, *IEEE Transactions on Mobile Computing*, 2008 – 2013
 - Associate Editor, *ACM Transactions on Sensor Networks*, 2009 – 2012
 - Area Editor, *Mobile Computing and Communications Review (MC2R)*, 2005 – 2010
 - Guest editor, *Elsevier Ad Hoc Networks Journal Special Issue on Wireless Communication and Networking in Challenged Environments*, 2011.
 - Guest editor, *IEEE Transactions on Image Processing (TIP) Special Issue on Distributed Camera Networks: Sensing, Processing, Communication and Computing*, 2010
 - Guest editor, *IEEE Journal on Selected Areas of Communication (JSAC) Special Issue on Simple Wireless Sensor Networking Solutions*, 2010
 - Guest editor, *EURASIP Journal of Wireless Communications and Networking Special Issue on Wireless Sensor Networks*, 2005
- IEEE Committees
 - Key Member, Interest Group on Distributed and Sensor Networks for Mobile Media Computing and Applications of the IEEE Multimedia Communication Technical Committee, 2010-2012
 - Elected member, Design and Implementation of Signal Processing Systems (DISPS) subcommittee of the IEEE Signal Processing Technical Committee, 2001–2004
 - IEEE Signal Processing Society Rochester Chapter (Chair, 2004, Steering Committee, 2002 – 2004)
 - IEEE Communications Society Rochester Chapter (Co-chair, 2004)
 - IEEE Rochester Section Nominating Committee (2014)
- Advisory Committees
 - University of Rochester David T. Kearns Center for Leadership and Diversity in Arts, Sciences and Engineering, 2009 - 2015
- Invited Workshops
 - NSF Broader Impacts for Research and Discovery Summit, June 2010
 - NSF Workshop on Future Directions in Networked Sensing, Nov. 2009

- Conference Organizing Committees
 - First international summer school of Green Communications and Networking (GreenComNet), Co-organizer, Summer 2013
 - SuMo-CPS (International Workshop on Sustainable Monitoring through Cyber-Physical Systems), Co-Chair, 2013
 - ACM SenSys (ACM Conference on Embedded Networked Sensor Systems)
 - Publication Chair, 2013
 - EWSN (European Conference on Wireless Sensor Networks)
 - Publicity Co-chair, 2014
 - Technical Program Committee Co-chair, 2012
 - IEEE INFOCOM (International Conference on Computer Communications)
 - Publicity Chair, 2010
 - IEEE DCOSS (Intl. Conference on Distributed Computing in Sensor Systems)
 - Vice TPC Chair for Systems and Applications Track, 2009
 - Poster Session Co-chair, 2007
 - Publicity Chair, 2006
 - Publicity Chair, 2005
 - IEEE SECON
 - General Vice Chair, 2007
 - Publicity Chair, 2006
 - IEEE ICIP (International Conference on Image Processing)
 - Exhibits Chair, 2002
 - ACM MobiCom (Intl. Conference on Mobile Computing and Networking)
 - Publicity Co-chair, 2005
 - ACM SenSys (Intl. Conference on Embedded Networked Sensor Systems)
 - Publications Chair, 2013
 - Publicity Co-chair, 2005
 - Poster session co-chair, 2004
 - ACM MobiHoc (Intl. Symposium on Mobile Ad Hoc Networking and Computing)
 - Poster Session Co-chair, 2006
 - ACM EmNetS (Workshop on Embedded Networked Sensors)
 - Publicity Advisor, 2005
 - IEEE/CreateNet BaseNets (Intl. Work on Broadband Advanced Sensor Networks)
 - Steering Committee, 2006
 - Steering Committee, 2005
 - Co-chair, 2004
 - IEEE/CreateNet BroadNets (Intl. Conference on Broadband Communications, Networks and Systems)
 - Workshop Co-chair, 2005
 - HealthNet (Intl. Workshop on Systems and Networking Support for Healthcare and Assisted Living Environments)
 - Demo Session Co-Chair, 2008
 - Upstate NY Workshop on Communications, Sensors and Networking
 - TPC Co-chair, 2006
 - TPC co-chair, 2003
 - Co-chair, 2002
- Technical Program Committees
 - IEEE INFOCOM (Conference on Computer Communications)

- IEEE SECON (International Conference on Sensors and Ad Hoc Communications and Networks)
 - IEEE MASS (Intl. Conference on Mobile Ad-Hoc and Sensor Systems)
 - IEEE DCOSS (International Conference on Distributed Computing in Sensor Systems)
 - IEEE ICDCS (International Conference on Distributed Computing Systems)
 - IEEE/ACM MSWiM (Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems)
 - IEEE ICC (International Conference on Communications)
 - IEEE Globecom
 - IEEE SenseApp (International Workshop on Practical Issues in Building Sensor Network Applications)
 - IEEE PerSeNS (International Workshop on Sensor Networks and Systems for Pervasive Computing)
 - IEEE ICIP (International Conference on Image Processing)
 - IEEE WMAN (International Workshop on Algorithms for Wireless, Mobile, Ad Hoc and Sensor Networks)
 - IEEE SiPS (Workshop on Signal Processing Systems)
 - IEEE ISSNIP (The Fifth International IEEE Conference on Intelligent Sensors, Sensor Networks and Information Processing)
 - ACM/IEEE IPSN (Intl. Conference on Info. Processing in Sensor Networks)
 - ACM MobiHoc (Intl. Symp. on Mobile Ad Hoc Networking and Computing)
 - ACM EmNets (International Workshop on Embedded Networked Sensors)
 - ACM MobiCom Student Poster Research Competition
 - ACM MobiWac (Intl. Workshop on Mobility Management and Wireless Access Protocols)
 - ACM SenSys Workshop BuildSys
 - EWSN (European Work. on Wireless Sensor Networks)
 - ICST AdHocNets (First International Conference on Ad Hoc Networks)
 - AlogSensors (Work. on Algorithmic Aspects of Wireless Sensor Networks)
 - MidSense (Middleware for Sensor Networks)
 - IWIoT (International Workshop on the Internet of Things, in conjunction with ChinaCom)
 - HealthNet (International Workshop on System and Networking Support for Healthcare and Assisted Living Environments)
 - SANPA (Intl. Work. on Sensor and Actuator Network Protocols and Apps.)
 - ISCN (International Symposium on Computer Networks)
 - IFIP MedHocNet (Annual Mediterranean Ad Hoc Networking Workshop)
 - Grace Hopper Celebration of Women in Computing Scholarship Reviewer
 - ATNAC (Australasian Telecom. Networks and Applications Conf.)
 - NetCri (International Workshop on Next Generation Networks for First Responders and Critical Infrastructures)
 - DSS (International Workshop on Distributed Sensor Systems)
 - ASWN (Work. on Apps. and Services in Wireless Nets.)
 - Work. on Next Generation Wireless Networks, co-located with IEEE HiPC
 - ITCC Wireless Ad-Hoc/Sensor Networks and Network Security Track
 - BroadWISE (Broadband Wireless Services and Applications Workshop)
 - MWN (ICPP Workshop on Mobile and Wireless Networking)
 - MCM (ICDCS Workshop on Mobile Computing Middleware)
- Funding reviews

- NSF proposal reviewer/panel member, Dec. 2001, June 2002, May 2004, June 2004, Nov. 2005, Feb. 2006, April 2006, May 2008 (CISE/NeTS), July 2008 (CISE/CSR), March 2009 (CISE/NetSE), Jan. 2010 (EFRI-SEED), Oct. 2010 (CISE/NeTS/CAREER), April 2014 (CIF)
- AFRL proposal reviewer (June 2008)
- ARO proposal reviewer (Dec. 2004)
- Journal reviews
 - IEEE Transactions on Mobile Computing
 - IEEE Transactions on Wireless Communication
 - IEEE Transactions on Parallel and Distributed Systems
 - IEEE Journal on Selected Areas of Communication
 - IEEE Transactions on Networking
 - IEEE Transactions on VLSI
 - IEEE Transactions on Image Processing
 - IEEE Transactions on Circuits and Systems
 - IEEE Transactions on Circuits and Systems for Video Technology
 - IEEE Transactions on Signal Processing
 - IEEE Network Magazine
 - IEEE Communications Magazine
 - Proceedings of the IEEE
 - ACM Transactions on Sensor Networks
 - ACM Mobile Computing and Communications Review (MC2R)
 - ACM/Kluwer MONET
 - Elsevier Ad Hoc Networks Journal
 - Computer Networks Journal
 - EURASIP Journal on Wireless Communications and Networking
 - Image Communication Journal
 - SPS Letters

PROFESSIONAL TRAINING

- CRA-W Advanced Career Mentoring Workshop (CAPP), November 15-15, 2008
- MIT Professional Institute Leadership Workshop for Engineering and Science Faculty, July 16-17, 2007
- CRA Academic Careers and Effective Teaching Workshop, February 4-6, 2001

UNIVERSITY OF ROCHESTER SERVICE

- Chair, Warner School of Education Dean Search Committee (2020)
- Steering Committee Member, Institute for Data Science (2014 – 2016)
- School of Arts & Sciences Dean search committee (2014-2015)
- ECE BS student advisor (class of 2010, 2006 – 2010)
- ECE BS student advisor (class of 2005, 2001 – 2005)
- ECE MS student advisor (2012, 2013, 2014, 2015)
- ECE faculty recruiting committee (2001 – 2002, 2002 – 2003, 2003 – 2004, 2005 – 2006, 2013, 2014 (chair))
- Tau Beta Pi (TBP) faculty advisor (2015 – 2016)
- IEEE faculty advisor (2013 – 2016)
- SWE faculty advisor (2005 – 2016)

- Guest lecturer in CSC 200/200H Undergraduate Problem Seminar (February 2015, February 2016)
- Guest lecturer in ECE 477 Computer Audition (October 2014, October 2015)
- Guest lecturer in CSC Networking course (March 2013, December 2013, October 2014)
- Guest lecturer in Women's Studies 100, "One Eye Open": Feminism, Women, and Scientific Knowing (February 2013)
- ECE Undergraduate committee (2004 – 2011)
- Faculty Senate (2006 – 2008)
- College Educational Policy (2006 – 2008)
- SEAS Dean search committee (2007)
- Faculty working group, undergraduate business degree exploration (2007)
- Take 5 selection committee (2006)
- Vice Provost and Dean of the Faculty of Arts, Sciences and Engineering search committee (2005)
- College faculty council (2003 – 2005)
- ECE graduate admissions committee (2002 – 2003)

OTHER SERVICE

- Rochester Engineering Society Scholarship Selection Committee, 2015, 2016
- IEEE Rochester Section ExCom Nomination Committee, 2014