Curriculum Vitae

Alexander M. Wyglinski, Ph.D.

Research Overview "By The Numbers"

Citations* = **4427**
h-index* = **36**
i10-index* = **84**
Number of peer-reviewed publications = **48** (journals/transactions), **121** (conferences)
Total research funding = $**2,874,296** (awards/grants), **$1,408,056** (gifts)
Number of published books = **3**
Graduated PhD Students = **11**

* = Obtained from Google Scholar on 07/21/2020

Education

Doctor of Philosophy (Electrical Engineering)
McGill University, Montreal, QC, Canada
September 2000 – November 2004
Thesis: Physical Layer Loading Algorithms for Indoor Wireless Multicarrier Systems
Advisors: Professor Fabrice Labeau & Professor Peter Kabal

Master of Science in Engineering (Electrical Engineering)
Queen's University, Kingston, ON, Canada
January 1999 – August 2000
Thesis: Performance of CDMA Systems using Digital Beamforming with Mutual Coupling and Scattering Effects
Advisor: Professor Steven D. Blostein

Bachelor of Engineering (Electrical Engineering), with distinction
McGill University, Montreal, QC, Canada
September 1995 – December 1998
Concentration: Communications and Signal Processing

Academic Appointments

Professor (July 2018 – Present)
Department of Electrical and Computer Engineering
Worcester Polytechnic Institute
Worcester, MA, USA

Professor (July 2018 – Present)
Department of Robotics Engineering (Courtesy)
Worcester Polytechnic Institute
Worcester, MA, USA

Associate Professor (July 2012 – June 2018)
Department of Electrical and Computer Engineering
Worcester Polytechnic Institute
Worcester, MA, USA

Associate Professor (July 2015 – June 2018)
Department of Robotics Engineering (Courtesy)
Worcester Polytechnic Institute
Worcester, MA, USA

Assistant Professor (August 2007 – June 2012)
Department of Electrical and Computer Engineering
Worcester Polytechnic Institute
Worcester, MA, USA

Courtesy Assistant Professor (July 2005 – July 2007)
Department of Electrical Engineering & Computer Science
The University of Kansas
Lawrence, KS, USA

Assistant Research Professor (July 2005 – July 2007)
Information and Telecommunication Technology Center (ITTC)
The University of Kansas
Lawrence, KS, USA

Research Associate (February 2005 – June 2005)
Centre for Advanced Systems and Technologies in Communications (SYTACom) and
Agile All-Photonic Networks (AAPN) Research Network
Montreal, QC, Canada

Faculty Lecturer (September 2003 – December 2003)
Department of Electrical & Computer Engineering
McGill University
Montreal, QC, Canada

Publications

Books

1. Travis Collins, Robin Getz, Di Pu, Alexander M. Wyglinski. Software Defined Radio for Engineers. Artech House, April 2018. Available online at:

https://www.analog.com/en/education/education-library/software-defined-radio-for-engineers.html

2. Di Pu, Alexander M. Wyglinski. Digital Communication Systems Engineering with Software-Defined Radio. Artech House, January 2013.
3. Alexander M. Wyglinski, Maziar Nekovee, Y. Thomas Hou. Cognitive Radio Communications and Networks: Principles and Practice. Academic Press, December 2009.

Book Chapters

1. Alexander M Wyglinski, Adrian Kliks, Pawel Kryszkiewicz, Hanna Bogucka. "Spectrally agile waveforms for practical CR implementation," in Cognitive Radio Deployment Opportunities: The Practical Reality, Hanna Bogucka, Oliver Holland, Arturas Medeisis, Eds. Wiley Publishing, April 2015.
2. Michael Leferman, Di Pu, Alexander M. Wyglinski. "GNU Radio for Cognitive Radio Experimentation," in Cognitive Radio Communications and Networks: Principles and Practice, Alexander M. Wyglinski, Maziar Nekovee, and Y. Thomas Hou, Eds. Academic Press, December 2009.
3. Timothy R. Newman, Joseph B. Evans, Alexander M. Wyglinski. "Reconfiguration, Adaptation, and Optimization" in Cognitive Radio Communications and Networks: Principles and Practice, Alexander M. Wyglinski, Maziar Nekovee, and Y. Thomas Hou, Eds. Academic Press, December 2009.
4. Srikanth Pagadarai, Rakesh Rajbanshi, Alexander M. Wyglinski. "Agile Transmission Techniques" in Cognitive Radio Communications and Networks: Principles and Practice, Alexander M. Wyglinski, Maziar Nekovee, and Y. Thomas Hou, Eds. Academic Press, December 2009.
5. Si Chen, Alexander M. Wyglinski. "Digital Communication Fundamentals for Cognitive Radio" in Cognitive Radio Communications and Networks: Principles and Practice, Alexander M. Wyglinski, Maziar Nekovee, and Y. Thomas Hou, Eds. Academic Press, December 2009.
6. Alexander M. Wyglinski, Maziar Nekovee, Y. Thomas Hou. "When Radio Meets Software" in Cognitive Radio Communications and Networks: Principles and Practice, Alexander M. Wyglinski, Maziar Nekovee, and Y. Thomas Hou, Eds. Academic Press, December 2009.
7. Brett Barker, Arvin Agah, and Alexander M. Wyglinski. "Mission-Oriented Communications Properties for Software Defined Radio Configuration," in Cognitive Radio Networks, Yang Xiao and Fei Hu, Eds. CRC Press, January 2009.
8. Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. "OFDM-Based Cognitive Radios for Dynamic Spectrum Access Networks," in Cognitive Wireless Communications Networks, Vijay Bhargava and Ekram Hossain, Eds. Springer-Verlag, 2007.
9. Alexander M. Wyglinski and Fabrice Labeau. "Adaptive Allocation for Spectrally-Efficient Wireless Communications," in Encyclopedia of Wireless and Mobile Communications, Borko Furht, Ed. CRC Press, 2007.
10. Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. "Peak-to-Average Power Ratio Reduction of Multicarrier Transceivers," in Encyclopedia of Wireless and Mobile Communications, Borko Furht, Ed. CRC Press, 2007.
11. Timothy Newman, Alexander M. Wyglinski, and Joseph B. Evans. "Cognitive Radio Implementation for Efficient Wireless Communication," in Encyclopedia of Wireless and Mobile Communications, Borko Furht, Ed. CRC Press, 2007.

Journal Articles (Peer-Reviewed)

1. S. Bilen, D. Mortensen, R. Reinhart, A. M. Wyglinski. “Where No Radio Has Gone Before: Cognitive Radios Can Keep Deep-Space Missions Connected to Earth Even When Faced With Alien Environments.” IEEE Spectrum, August 2020.
2. L. Wang, R. Iida and A. M. Wyglinski. “Vehicular Network Simulation Environment via Discrete Event System Modeling.” IEEE Access, vol. 7, pp. 87246-87264, 2019.
3. P. V. R. Ferreira, R. Paffenroth, A. M. Wyglinski, T. M. Hackett, S. G. Bilen, R. C. Reinhart, D. J. Mortensen. “Reinforcement Learning for Satellite Communications: From LEO to Deep Space Operations.” IEEE Communications Magazine, vol. 57, no. 5, pp. 70-75, May 2019.
4. Timothy M. Hackett, Sven G. Bilen, Paulo Victor R. Ferreira, Alexander M. Wyglinski, Richard C. Reinhart, and Dale J. Mortensen. “Implementation and On-orbit Testing Results of a Space Communications Cognitive Engine.” IEEE Transactions on Cognitive Communications and Networks, Volume 4, Issue 4, Dec. 2018.
5. Paulo Victor R. Ferreira, Randy Paffenroth, Alexander M. Wyglinski, Timothy M. Hackett, Sven G. Bilen, Richard C. Reinhart, and Dale J. Mortensen. “Multiobjective Reinforcement Learning for Cognitive Satellite Communications Using Deep Neural Network Ensembles” IEEE Journal on Select Areas in Communications, Volume 36, Issue 5, Page(s): 1030-1041, May 2018.
6. K. Gill, B. Aygun, K. Heath, R.J. Gegear, E.F. Ryder, and A.M. Wyglinski. “Memory Matters: Bumblebee Behavioral Models for Vehicle-to-Vehicle Communications.” IEEE Access, Vol. 6, pp. 25437 – 25447, Apr. 2018.
7. Hristos Giannopoulos, Alexander M. Wyglinski, Joseph Chapman. “Securing Vehicular Controller Area Networks: An Approach to Active Bus-Level Countermeasures.” IEEE Vehicular Technology Magazine, Vol. 12, No. 4, December 2017.
8. Di Pu, Bengi Aygun, Alexander M. Wyglinski. “Primary User Emulation Detection Algorithm Based on Distributed Sensor Networks.” International Journal of Wireless Information Networks, July 2017.
9. Sean Rocke, Alexander M. Wyglinski. “Random Spectral Sampling for Compliance Enforcement in Dynamic Spectrum Access Networks.” Wireless Personal Communications, Vol. 96, No. 2, May 2017.
10. Travis F. Collins, Alexander M. Wyglinski. “Data-Flow in MATLAB: Algorithm Acceleration Through Concurrency.” IEEE Access, February 2017.
11. Paulo V. R. Ferreira, Randy Paffenroth, Alexander M. Wyglinski. “Interactive Multiple Model Filter for Land-Mobile Satellite Communications at Ka-Band.” IEEE Access, December 2016.
12. Bengi Aygun, Mate Boban, Alexander M. Wyglinski. “ECPR: Environment- and Context-aware Combined Power and Rate Distributed Congestion Control for Vehicular Communications.” Elsevier Computer Communications, November 2016.
13. Mohamed Abdelaziz, Zhu Fu, Lauri Anttila, Mikko Valkama, Alexander M Wyglinski. “Digital Predistortion for Mitigating Spurious Emissions in Spectrally Agile Radios.” IEEE Communications Magazine, Vol 54, No. 3, March 2016.
14. Alexander M. Wyglinski, Don Orofino, Matt Ettus, Tom Rondeau. “Software Defined Radio: Revolutionizing Communication System Design and Prototyping.” IEEE Communications Magazine, Vol. 54, No. 1, January 2016.

15. Bengi Aygun, Alexander M. Wyglinski. “A Voting Based Distributed Cooperative Spectrum Sensing Strategy for Connected Vehicles.” IEEE Transactions on Vehicular Technology, November 2016.
16. Travis Collins, Christopher Anderson, Alexander M. Wyglinski. “Implementation and Analysis of Spectral Subtraction in Deterministic Wide-Band Anti-Jamming Scenarios.” Wiley Wireless Communications and Mobile Computing Journal, November 2016.
17. Zhu Fu, Lauri Anttila, Mohamed Abdelaziz, Mikko Valkama, Alexander M Wyglinski. “Frequency-Selective Digital Predistortion for Unwanted Emission Reduction.” IEEE Transactions on Communications, Vol. 63, No. 1, Pages 254-267, January 2015.
18. Raquel Machado, Alexander M. Wyglinski. “Software-Defined Radio: Bridging the Analog–Digital Divide.” Proceedings of the IEEE, Vol 103, No. 3, March 2015.
19. Sven Bilen, Alexander M Wyglinski, Christopher R. Anderson, Todor Cooklev, Carl Dietrich, Behrouz Farhang-Boroujeny, Julio V Urbina, Steve H Edwards, Jeff H Reed. “Software-Defined Radio: A New Paradigm for Integrated Curriculum Delivery.” IEEE Communications Magazine, May 2014.
20. Di Pu, Alexander M. Wyglinski. “Primary User Emulation Detection Using Database Assisted Frequency Domain Action Recognition.” IEEE Transactions on Vehicular Technology, Vol. 63, No. 9, November 2014.
21. Le Wang, Alexander M. Wyglinski. “Detection of Man-In-The-Middle Attacks Using Physical Layer Wireless Security Techniques.” Wiley Wireless Communications and Mobile Computing Journal, 2014.
22. Srikanth Pagadarai, Alexander M. Wyglinski and Christopher R. Anderson. “Low-Mobility Channel Tracking for MIMO-OFDM Communication Systems.” EURASIP Journal on Advances in Signal Processing, April 2013.
23. Srikanth Pagadarai, Bennett A. Lessard, Alexander M. Wyglinski, Rama Vuyyuru, Onur Altintas. “Vehicular Communication: Enhanced Networking Through Dynamic Spectrum Access.” IEEE Vehicular Technology Magazine, 1 September 2013.
24. Alexander M. Wyglinski, Xinming Huang, Taskin Padir, Lifeng Lai, Thomas R. Eisenbarth, Krishna Venkatasubramanian. “Security of Autonomous Systems Employing Embedded Computing and Sensors.” IEEE Micro, January/February 2013.
25. Pawel Kryszkiewicz, Hanna Bogucka, Alexander M. Wyglinski. “Protection of Primary Users in Dynamically Varying Radio Environment: Practical Solutions and Challenges.” EURASIP Journal on Wireless Communications and Networking, January 2012.
26. Si Chen, Srikanth Pagadarai, Rama Vuyyuru, Alexander M. Wyglinski, Onur Altintas. “Feasibility Analysis of Vehicular Dynamic Spectrum Access via Queueing Theory Model.” IEEE Communications Magazine, November 2011.
27. Zhiwei Li, Di Pu, Weichao Wang, Alexander M. Wyglinski. “Forced Collision: Detecting Wormhole Attacks with Physical Layer Network Coding.” Tsinghua Science and Technology Journal – Special Issue on Wireless Mobile Computing and Networking, vol. 16, no. 5, pp. 505-519, October 2011.
28. Srikanth Pagadarai, Adrian Kliks, Hanna Bogucka, Alexander M. Wyglinski. “Non-contiguous Multicarrier Waveforms in Practical Opportunistic Wireless Systems.” IET Radar, Sonar, and Navigation Journal, vol. 5, no. 6, pp. 674-680, July 2011.

29. Hanna Bogucka, Alexander M. Wyglinski, Srikanth Pagadarai, Adrian Kliks. “Spectrally Agile Multicarrier Waveforms for Opportunistic Wireless Access”. IEEE Communications Magazine, June 2011.
30. Roberto Airoldi, Omer Anjum, Fabio Garzia, Alexander Wyglinski, Jari Nurmi, “Energy-Efficient Fast Fourier Transforms for Cognitive Radio Systems,” IEEE Micro, vol. 30, no. 6, pp. 66-76, Nov./Dec. 2010.
31. Srikanth Pagadarai, Alexander M. Wyglinski. “A Linear Mixed Effects Model of Wireless Spectrum Occupancy.” EURASIP Journal on Wireless Communications and Networking, August 2010.
32. Mika Juhani Husso, Jyri Hämäläinen, Riku Jantti, Juan Li, Edward Mutafungwa, Risto Wichman, Zhong Zheng and Alexander M. Wyglinski. “Interference Suppression by Practical Transmit Beamforming Methods in Closed Femtocells.” EURASIP Journal on Wireless Communications and Networking, June 2010.
33. Zhou Yuan, Alexander M. Wyglinski. “On Sidelobe Suppression for Multicarrier-Based Cognitive Radio Transceivers.” IEEE Transactions on Vehicular Technology, May 2010.
34. Di Pu, Alexander M. Wyglinski, Mike McLernon. “An Analysis of Frequency Rendezvous for Decentralized Dynamic Spectrum Access.” IEEE Transactions on Vehicular Technology, May 2010.
35. Chittabrata Ghosh, Srikanth Pagadarai, Dharma P. Agrawal, Alexander M. Wyglinski. “A Framework for Statistical Wireless Spectrum Occupancy Modeling.” IEEE Transactions on Wireless Communications, Vol. 9, No. 1, Pages 38-44, January 2010.
36. Timothy Newman, Daniel DePardo, Alexander Wyglinski, Joseph B. Evans, Rakesh Rajbanshi, Victor R. Petty, Dinesh Datla, Frederick Weidling, Paul Kolodzy, Michael Marcus, Gary J. Minden, James Roberts. “Measurements and Analysis of Secondary User Device Effects on Digital Television Receivers.” EURASIP Journal on Advances in Signal Processing – Special Issue on Dynamic Spectrum Access for Wireless Networking, August 2009.
37. Si Chen, Alexander M. Wyglinski. “Efficient Spectrum Utilization via Cross-Layer Optimization in Distributed Cognitive Radio Networks.” Elsevier Computer Communications Journal – Special Issue on Cognitive Radio and Dynamic Spectrum Sharing Systems, Vol. 32, No. 18, Pages 1931-1943, December 2009.
38. Dinesh Datla, Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. “An Adaptive Spectrum Sensing Architecture for Dynamic Spectrum Access Networks.” IEEE Transactions on Wireless Communications, Vol. 8, No. 8, Pages 4211-4219, August 2009.
39. Dinesh Datla, Alexander M. Wyglinski, and Gary J. Minden. “A Spectrum Surveying Framework for Dynamic Spectrum Access Networks.” IEEE Transactions on Vehicular Technology, Vol. 58, No. 8, Pages 4158-4158, April 2009.
40. Gregory D. Troxel, Eric Blossom, Steve Boswell, Micah Brodsky, Armando Caro, Isidro Castineyra, Alex Colvin, Tad Dreier, Joseph B. Evans, Nick Goffee, Karen Haigh, Talib Hussain, Vikas Kawadia, David Lapsley, Carl Livadas, Alberto Medina, Joanne Mikkelson, Gary J. Minden, Robert Morris, Craig Partridge, Vivek Raghunathan, Ram Ramanathan, Cesar Santivanez, Thomas Schmid, Dan Sumorok, Mani Srivastava, Bob Vincent, David Wiggin, Alexander M. Wyglinski, and Sadaf Zahedi. “Enabling Open-source Cognitively-controlled Collaboration among Software-Defined Radio Nodes.” Computer Networks, Vol. 52, No. 4, Pgs. 898-911, 14 March 2008.

41. Timothy Newman, Rakesh Rajbanshi, Alexander M. Wyglinski, Joseph B. Evans, and Gary J. Minden. "Population Adaptation for Genetic Algorithm-based Cognitive Radios." ACM/Springer Mobile Networks and Applications Journal, Volume 13, Issue 5, Pages 442-451, October 2008.
42. Alexander M. Wyglinski, Martin Cudnoch, Fabrice Labeau, and Peter Kabal. "Adaptive-Length Equalizers for Wireless Multicarrier Transceivers." IEEE Transactions on Vehicular Technology, Vol. 57, No. 1, Pgs. 393-403, January 2008.
43. Martin Cudnoch, Alexander M. Wyglinski, and Fabrice Labeau. "DSP Implementation of a Bit Loading Algorithm for Adaptive Wireless Multicarrier Transceivers." Wiley Journal on Wireless Communications and Mobile Computing, Vol. 7, No. 9, Pgs. 1117-1128, November 2007.
44. Tim R. Newman, Brett A. Barker, Alexander M. Wyglinski, Arvin Agah, Joseph B. Evans, and Gary J. Minden. "Cognitive Engine Implementation for Wireless Multicarrier Transceivers." Wiley Journal on Wireless Communications and Mobile Computing, Vol. 7, No. 9, Pgs. 1129-1142, November 2007.
45. Alexander M. Wyglinski, Fabrice Labeau, and Peter Kabal. "Loading Algorithm for Multicarrier Spatial Diversity Systems with Antenna Selection." IEEE Transactions on Wireless Communications, Vol. 6, No. 6, Pgs. 2060-2065, June 2007.
46. Alexander M. Wyglinski, Fabrice Labeau, and Peter Kabal. "Bit Loading with BER-Constraint for Multicarrier Systems." IEEE Transactions on Wireless Communications, Vol. 4, No. 4, Pgs. 1383-1387, July 2005.
47. Alexander M. Wyglinski and Steven D. Blostein. "On Uplink Cell Capacity: Mutual Coupling and Scattering Effects on Beamforming." IEEE Transactions on Vehicular Technology, Vol. 52, No. 2, Pgs. 289-304, March 2003.
48. Brian A. Lepine, Brian P. Wallace, David S. Forsyth, Alex Wyglinski. "Pulsed Eddy Current Method Developments for Hidden Corrosion Detection in Aircraft Structures." Canadian Society for Non-Destructive Testing (CSNDT) Journal, Vol. 20, No. 6., Pgs. 6-14, November/December 1999.

Journal Articles (Non-Peer-Reviewed)

1. Bengi Aygun, Rob Gegear, Liz Ryder, Alexander M. Wyglinski. "Adaptive Behavioral Responses for Dynamic Spectrum Access-Based Connected Vehicle Networks." IEEE Communications Society Technical Committee on Cognitive Networks Communications E-Newsletter, December 2015.
2. Alexander M. Wyglinski. "Changing the Way Wireless Technology Accesses Electromagnetic Spectrum." EEWeb Pulse Magazine, Issue 14, 4 October 2011.
3. Alexander M. Wyglinski. "Tips from the Proposal Writing Trenches: Working with OSP." WPI Office of Sponsored Programs Newsletter, Fall 2011.
4. Kouta Nishida, Youhei Fujii, Abdulrahman Al-Abbasi, Kazuya Tsukamoto, Onur Altintas, Mitsuhiro Nishibori, Rama Vuyyuru, Srikanth Pagadarai*, Alexander M. Wyglinski, Takeo Fujii, Masato Tsuru, and Yuji Oie. "Implementation and Evaluation of Distributed Control and Data Channel Coordination Algorithms for V2V DSA." Technical Report of IEICE, October 2010. [in Japanese]
5. Michael J. Leferman, Alexander M. Wyglinski. "Taming Software-Defined Radio: A Graphical User Interface for Digital Communication System Prototyping." DSP-FPGA.com – The Journal of Embedded Signal Processing, January 2010.
6. Alexander M. Wyglinski. "Cognitive Radio Communications and Networks." IEEE Communications Magazine, April 2008.

7. William Krenik, Alexander M. Wyglinski, and Linda E. Doyle. “Cognitive Radios for Dynamic Spectrum Access.” IEEE Communications Magazine, May 2007.

Patents

1. Scott Kuzdeba, Brandon Hombs, Alexander M. Wyglinski. "Visual Communications System Employing Video Imagery." Patent No. US 20140036103.

Conference Papers (Peer-Reviewed)

1. Emmanuel Effah, Ousmane Thiare, Alexander M. Wyglinski. “Multi-Objective Modeling of Clustering-Based Agricultural Internet of Things.” Proceedings of the IEEE 92nd Vehicular Technology Conference: VTC2020-Fall (Victoria, BC, Canada). October 2020.
2. Emmanuel Effah, Ousmane Thiare, Alexander M. Wyglinski. “Energy-Efficient Multihop Routing Framework for Cluster-Based Agricultural Internet of Things (CA-IoT).” Proceedings of the IEEE 92nd Vehicular Technology Conference: VTC2020-Fall (Victoria, BC, Canada). October 2020.
3. Jennifer Legaspi, Casey I. Canfield, Kuldeep S. Gill, Alexander M. Wyglinski, Shamsnaz V. Bhada. “Integrated Agent-Based Model for Broadband Resource Allocation Analysis.” Proceedings of the IEEE 91st Vehicular Technology Conference: VTC2020-Spring (Antwerp, Belgium). May 2020.
4. Nivetha Kanthasamy, Alexander M. Wyglinski, Raghvendra Cowlagi. “Effects of Interference on Beamforming-Enabled Vehicular Networks in Multipath Propagation Environments.” Proceedings of the IEEE 91st Vehicular Technology Conference: VTC2020-Spring (Antwerp, Belgium). May 2020.
5. Pawel Sroka, Pawel Kryszkiewicz, Michal Sybis, Adrian Kliks, Kuldeep S. Gill, Alexander Wyglinski. “Distributed Vehicular Dynamic Spectrum Access for Platooning Environments.” Proceedings of the IEEE 91st Vehicular Technology Conference: VTC2020-Spring (Antwerp, Belgium). May 2020.
6. Kuldeep S. Gill, Kevin N. Heath, Sreeshti Chuke, Aneela Haider, Robert J. Gegear, Elizabeth F. Ryder, Alexander M. Wyglinski. “Bumblebee-Inspired C-V2X Dynamic Spectrum Access Testbed Using OpenAirInterface.” Proceedings of the IEEE 91st Vehicular Technology Conference: VTC2020-Spring (Antwerp, Belgium). May 2020.
7. Le Wang, Renato F. Iida and Alexander M. Wyglinski, “Performance Analysis of Multichannel EDCA-Based V2V Communications via Discrete Event System,” Proceedings of the 2019 IEEE 90th Vehicular Technology Conference (VTC2019-Fall), Honolulu, HI, USA, 2019, pp. 1-5.
8. Kyle McClintick, Mark Page, Thanuka Wickramarathne, Alexander M. Wyglinski. “Machine Learning-Based Roadside Vehicular Traffic Localization via Opportunistic Wireless Sensing.” Proceedings of 7th IEEE Global Conference on Signal and Information Processing (GlobalSIP), November 2019.
9. Nivetha Kanthasamy, Raghvendra V. Cowlagi, Alexander Wyglinski. “State Estimation for Mitigating Positioning Errors in V2V Networks Employing Dual Beamforming.” Proceedings of the 2018 IEEE 88th Vehicular Technology Conference: VTC2018-Fall 27–30 August 2018, Chicago, USA.
10. Nivetha Kanthasamy, Ruixiang Du, Kuldeep S. Gill, Alexander Wyglinski, Raghvendra V. Cowlagi. “Assessment of Positioning Errors on V2V Networks Employing Dual Beamforming.” Proceedings of the 2018 IEEE 88th Vehicular Technology Conference: VTC2018-Fall 27–30 August 2018, Chicago, USA.

11. Jabari Stegall, Alexander Wyglinski. “Secure Distributed Anonymous Data Collection for Vehicular Ad-Hoc Networks.” Proceedings of the 2018 IEEE 88th Vehicular Technology Conference: VTC2018-Fall 27–30 August 2018, Chicago, USA.
12. Le Wang, Renato F. Iida, Alexander Wyglinski. “Coordinated Lane Changing Using V2V Communications.” Proceedings of the 2018 IEEE 88th Vehicular Technology Conference: VTC2018-Fall 27–30 August 2018, Chicago, USA.
13. Kyle McClintick, Alexander Wyglinski. “Physical Layer Neural Network Framework for Training Data Formation.” Proceedings of the 2018 IEEE 88th Vehicular Technology Conference: VTC2018-Fall 27–30 August 2018, Chicago, USA.
14. Kuldeep S. Gill, Kyle McClintick, Nivetha Kanthasamy, Jeffrey Tolbert, Duong Nguyen, Son Nguyen, Galahad Wernsing, Valerie Moore, Ian Gelman, Alexander O’Neil, Nicholas Schubert, Corey Coogan, Krysta Murdy, Brian Mahan, Sylvester Halama, Kevin N. Heath, Elizabeth F. Ryder, Robert J. Gegear, Alexander Wyglinski. “Experimental Test-Bed For Bumblebee-Inspired Channel Selection in an Ad-hoc Network.” Proceedings of the 2018 IEEE 88th Vehicular Technology Conference: VTC2018-Fall 27–30 August 2018, Chicago, USA.
15. K Gill, KN Heath, RJ Gegear, EF Ryder, AM Wyglinski. “On the Capacity Bounds for Bumblebee-Inspired Connected Vehicle Networks via Queuing Theory.” Proceedings of the 2018 IEEE 87th Vehicular Technology Conference: VTC2018-Spring, 3-6 June 2018, Porto, Portugal.
16. Kuldeep S. Gill, Paulo Victor R. Ferreira, Alexander M. Wyglinski. “Performance Analysis of High Speed Railways Communications Inside a Tunnel Using LTE-R .” Proceedings of the IEEE 86th Vehicular Technology Conference (Toronto, Canada), September 2017.
17. Le Wang, Renato Iida, Alexander M. Wyglinski. “Performance Analysis of EDCA for IEEE 802.11p/DSRC based V2V Communication in Discrete Event System.” Proceedings of the IEEE 86th Vehicular Technology Conference (Toronto, Canada), September 2017.
18. Kuldeep S. Gill, Alexander M. Wyglinski. “Heterogeneous Cooperative Spectrum Sensing Test-Bed Using Software-Defined Radios.” Proceedings of the IEEE 86th Vehicular Technology Conference (Toronto, Canada), September 2017.
19. Bengi Aygun, Chung-Wei Lin, Shinichi Shiraishi, Alexander M. Wyglinski. “Selective Message Relaying for Multi-Hopping Vehicular Networks.” Proceedings of the IEEE Vehicular Networking Conference (Torino, Italy), November 2017.
20. Timothy M. Hackett, Sven G. Bilen, Paulo Victor R. Ferreira, Alexander M. Wyglinski, Richard C. Reinhart. “Implementation of a space communications cognitive engine.” Proceedings of the 2017 Cognitive Communications for Aerospace Applications Workshop, CCAA 2017, June 2017.
21. Paulo Victor Rodrigues Ferreira, Alexander M. Wyglinski, Timothy M. Hackett, Sven G. Bilen, Richard C. Reinhart, Dale J. Mortensen. “Multi-Objective Reinforcement Learning-based Deep Neural Networks for Cognitive Space Communications.” Proceedings of the 2017 Cognitive Communications for Aerospace Applications Workshop, CCAA 2017, June 2017.
22. Scott Kuzdeba, Alexander M. Wyglinski, Brandon Hombs. “Prototype Implementation of a Visual Communication System Employing Video Imagery.” Proceedings of the IEEE Consumer Communications and Networking Conference (Las Vegas, NV, USA), January 2013.
23. Amber L. Silva, Joshua D. Niedzwiecki, Alexander M. Wyglinski, Brandon Hombs. “Coordinated Optimization of Underlay Network Communication for Efficient Use of Spectrum.” Proceedings of the IEEE Global Communications Conference (Anaheim, CA, USA), December 2012.

24. Sean Rocke, Si Chen, Rama Vuyyuru, Onur Altintas, Alexander M. Wyglinski. “Knowledge-based Dynamic Channel Selection in Vehicular Networks.” Proceedings of the IEEE Vehicular Networking Conference (Seoul, Korea), October 2012.
25. Mai Ohta, Takamasa Kimura, Hasan Rajib Imam, Sean Rocke, Jingkai Su, Alexander M. Wyglinski, Takeo Fujii. “Channel Selection Statistics for Control Information Sharing within Cognitive Radio Networks.” Proceedings of the 76th IEEE Vehicular Technology Conference (Quebec City, QC, Canada), September 2012.
26. Si Chen, Rama Vuyyuru, Onur Altintas, and Alexander M. Wyglinski. “Learning-Based Channel Selection of VDSA Networks in Shared TV Whitespace.” Proceedings of the 76th IEEE Vehicular Technology Conference (Quebec City, QC, Canada), September 2012.
27. Steven J. Olivieri, Jim Aarestad, L. Howard Pollard, Alexander M. Wyglinski, Craig Kief, R. Scott Erwin. “Modular FPGA-Based Software Defined Radio for CubeSats.” Proceedings of the 2012 IEEE International Conference on Communications (Ottawa, ON, Canada), June 2012.
28. Sean Rocke, Alexander M. Wyglinski. “Estimation of Spectrum Occupancy in Heterogeneous Radio Access Environments using Random Spectral Sampling.” Proceedings of the 35th IEEE Sarnoff Symposium (Newark, NJ, USA), May 2012.
29. Travis Collins, Patrick Desantis, David Vecchiarelli, Alexander M. Wyglinski, Sean McGrath. “Energy-Conscious Prototype for Enabling Multi-Protocol Wireless Communications.” Proceedings of the 35th IEEE Sarnoff Symposium (Newark, NJ, USA), May 2012.
30. Zhu Fu, Lauri Anttila, Mikko Valkama, Alexander M. Wyglinski. “Digital Pre-distortion of Power Amplifier Impairments in Spectrally Agile Transmissions.” Proceedings of the 35th IEEE Sarnoff Symposium (Newark, NJ, USA), May 2012.
31. Zhu Fu, Alexander M. Wyglinski. “Digital Pre-distortion of Radio Frequency Front-end Impairments in the Design of Spectrally Agile Multicarrier Transmission.” Proceedings of the 47th Annual Asilomar Conference on Signals, Systems and Computers (Pacific Grove, CA, USA), November 2013 [INVITED].
32. Robert I. Desourdis, Mark O’Brien, John McCoskey, Alexander M. Wyglinski. “Secure Targetable Digital Television Datacast: An Existing National Network for Broadband Public Safety Communications.” Proceedings of the IEEE International Conference on Technologies for Homeland Security (Waltham, MA, USA), November 2013.
33. Bengi Aygun, Alkan Soysal, Alexander M. Wyglinski. “Short Paper: Performance Analysis of MIMO-Based Decode-and-Forward Relaying VANETs .” Proceedings of the IEEE Vehicular Networking Conference (Boston, MA, USA), 15 December 2013.
34. Aleksi Marttinen, Alexander M Wyglinski, Riku Jantti. “Moving-Target Defense Mechanisms Against Source-Selective Jamming Attacks in Tactical Cognitive Radio MANETs.” in Proceedings of the IEEE Communications and Networking Security Conference, October 2014.
35. Rohan Grover, Samuel J Macmullan, Alexander M Wyglinski. “Reconfigurable Wireless Platforms for Spectrally Agile Coexistence.” Proceedings of IEEE International Symposium on New Frontiers on Dynamic Spectrum Access Networks, April 2014.
36. Paulo Victor Ferreira, Rushabh Mehta, Alexander M Wyglinski. “Cognitive Radio-Based Geostationary Satellite Communications for Ka-band Transmissions.” Proceedings of the IEEE Global Conference on Signal and Information Processing, October 2014.

37. Aleksi Marttinen, Alexander M Wyglinski, Riku Jantti. “Statistics-based Jamming Detection Algorithm for Jamming Attacks Against Tactical MANETs.” Proceedings of the IEEE Military Communications Conference, October 2014.
38. Bengi Aygun, Alexander M Wyglinski. “Channel Modeling of Decode-and-Forward Relaying VANETs.” Proceedings of the 80th IEEE Vehicular Technology Conference, September 2014.
39. Mostafa El Gamal, Bengi Aygun, Alexander M Wyglinski. “Performance Analysis for High-Velocity Connected Vehicles.” Proceedings of the 81st IEEE Vehicular Technology Conference, May 2015.
40. Ain-ul-Aisha, Nikita Mayekar, Alexander M Wyglinski. “Interference Performance Evaluation of Secondary Users in Cognitive Radio Networks.” Proceedings of the 81st IEEE Vehicular Technology Conference, May 2015.
41. Travis Collins, Alexander M. Wyglinski. “Co-Channel Interference In Future Femtocell Networks.” Proceedings of the 82nd IEEE Vehicular Technology Conference, September 2015.
42. Paulo Ferreira, Alexander M. Wyglinski. “Performance analysis of UHF mobile satellite communication system experiencing ionospheric scintillation and terrestrial multipath fading.” Proceedings of the 82nd IEEE Vehicular Technology Conference, September 2015.
43. Travis Collins, Alexander M. Wyglinski. “SkyNet: SDR-Based Physical Simulation Testbed.” Proceedings of the 82nd IEEE Vehicular Technology Conference, September 2015.
44. Mahmoud Abdelaziz, Lauri Anttila, Sener Dikmese, Markku Renfors, Alexander M. Wyglinski, Mikko Valkama. “Flexible Digital Predistortion for Future Spectrally-Agile Waveforms and 5G Radio Systems.” Proceedings of the 82nd IEEE Vehicular Technology Conference, September 2015.
45. Srikanth Pagadarai, Rohan Grover, Sam MacMullan, Alexander M. Wyglinski. “Digital Predistortion of Power Amplifiers for Spectrally Agile Wireless Transmitters.” Proceedings of the 83rd IEEE Vehicular Technology Conference, May 2016.
46. Bengi Aygun, Joao Vilela, Mate Boban, Alexander M. Wyglinski. “Geometry-Based Propagation Modeling and Simulation of Vehicle-to-Infrastructure Links.” Proceedings of the 83rd IEEE Vehicular Technology Conference, May 2016.
47. Sean Rocke, Alexander M. Wyglinski. “More Flexible Radio Regulations: Investigating Random Spectrum Sampling Techniques for Temporal Occupancy Characterization.” Proceedings of the IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, June 2015.
48. Paulo V. R. Ferreira, Randy Paffenroth, Alexander M. Wyglinski, Timothy Hackett, Sven Bilen, Richard Reinhart, Dale Mortensen. “Multi-Objective Reinforcement Learning for Cognitive Radio–Based Satellite Communications.” Proceedings of the 34th AIAA International Communications Satellite Systems Conferences, October 2016.
49. Timothy Hackett, Sven Bilen, Paulo V. R. Ferreira, Alexander M. Wyglinski, Richard Reinhart. “Implementation of a Parameterized Interacting Multiple Model Filter on an FPGA for Satellite Communications Category: Autonomy and Adaptive/Cognitive System Technologies.” Proceedings of the 34th AIAA International Communications Satellite Systems Conferences, October 2016.
50. Bengi Aygun, Chung-Wei Lin, Shinichi Shiraishi, Alexander M. Wyglinski. “Selective Message Relaying for Multi-Hopping Vehicular Networks.” Proceedings of the IEEE Vehicular Networking Conference, December 2016.

51. Steven J. Olivieri, Jim Aarestad, L. Howard Pollard, Alexander M. Wyglinski, Craig Kief, R. Scott Erwin. “Modular FPGA-Based Software Defined Radio for CubeSats.” Proceedings of the 2012 IEEE International Conference on Communications (Ottawa, ON, Canada), June 2012.
52. Si Chen, Rama Vuyyuru, Onur Altintas, Alexander M. Wyglinski. “Learning in Vehicular Dynamic Spectrum Access Networks: Opportunities and Challenges.” Proceedings of the International Symposium on Intelligent Signal Processing and Communication Systems, (Chiang Mai, Thailand), December 2011. (INVITED)
53. Di Pu, Yuan Shi, Andrei Ilyashenko, Alexander M. Wyglinski. “Detecting Primary User Emulation Attacks in Cognitive Radio Networks.” Proceedings of the IEEE Global Telecommunications Conference (Houston, TX, USA), November 2011.
54. Si Chen, Rama Vuyyuru, Onur Altintas, Alexander M. Wyglinski. “On Optimizing Vehicular Dynamic Spectrum Access Networks: Automation and Learning in Mobile Wireless Environments.” Proceedings of the IEEE Vehicular Network Conference (Amsterdam, The Netherlands), November 2011.
55. Tayyar Rzayev, Yuan Shi, Anastasios Vafeiadis, Srikanth Pagadarai, Alexander M. Wyglinski. “Implementation of a Vehicular Networking Architecture Supporting Dynamic Spectrum Access.” Proceedings of the IEEE Vehicular Network Conference (Amsterdam, The Netherlands), November 2011.
56. Onur Altintas, Mitsuhiro Nishibori, Takuro Oshida, Yutaka Ihara, Masahiro Saito, Chikara Yoshimura, Youhei Fujii, Kota Nishida, Kazuya Tsukamoto, Masato Tsuru, Yuji Oie, Rama Vuyyuru, Abdulrahman Al Abbasi, Masaaki Ohtake, Mai Ohta, Takeo Fujii, Si Chen, Srikanth Pagadarai, Alexander M. Wyglinski. “Demonstration of Vehicle to Vehicle Communications over TV White Space.” Proceedings of the 4th International Symposium on Wireless Vehicular Communications (San Franscisco, CA, USA), September 2011.
57. Jingkai Su, Alexander M. Wyglinski. “Multihop Routing and Resource Allocation for Multimedia Applications in Dynamic Spectrum Access Networks.” Proceedings of the 2011 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing (Victoria, BC, Canada), August 2011.
58. Si Chen, Chittabrata Ghosh, Alexander M. Wyglinski, Sudharman Jayaweera. “Impact of Group Cooperation over Competitive Secondary Subnetworks.” Proceedings of the 2011 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing (Victoria, BC, Canada), August 2011.
59. Sean Rocke, Alexander M. Wyglinski. “Geo-Statistical Analysis of Wireless Spectrum Occupancy using Extreme Value Theory.” Proceedings of the 2011 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing (Victoria, BC, Canada), August 2011.
60. Di Pu, Alexander M. Wyglinski. “Primary User Emulation Detection Using Frequency Domain Action Recognition.” Proceedings of the 2011 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing (Victoria, BC, Canada), August 2011.
61. Lin Shen, Sean Rocke, Si Chen, Hanyuan Lu, Alexander M. Wyglinski. “Control Strategies on Cross-layer Optimization within Secondary Spectrum Access Networks.” Proceedings of the 2011 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing (Victoria, BC, Canada), August 2011.
62. Le Wang, Alexander M. Wyglinski. “A Combined Approach for Distinguishing Different Types of Jamming Attacks Against Wireless Networks.” Proceedings of the 2011 IEEE Pacific Rim

Conference on Communications, Computers, and Signal Processing (Victoria, BC, Canada), August 2011.

63. Srikanth Pagadarai, Alexander M. Wyglinski, Christopher R. Anderson. “An Evaluation of the Bayesian CRLB for Time-Varying MIMO Channel Estimation Using Complex-Valued Differentials.” Proceedings of the 2011 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing (Victoria, BC, Canada), August 2011.
64. Alexander M. Wyglinski, Di Pu, Daniel Cullen. “Digital Communication Systems Education via Software-Defined Radio Experimentation.” Proceedings of the American Society of Engineering Education Annual General Conference (Vancouver, BC, Canada), June 27, 2011.
65. Si Chen, Alexander M. Wyglinski, Rama Vuyyuru, Onur Altintas. “Feasibility Analysis of Vehicular Dynamic Spectrum Access Via Queueing Theory Model”. Proceedings of the IEEE Vehicular Networking Conference (Jersey City, NJ, USA), December 2010.
66. Zhiwei Li, Di Pu, Alexander M. Wyglinski, Weichao Wang. “Node Localization in Wireless Networks Through Physical Layer Network Coding”. Proceedings of the IEEE Global Telecommunications Conference (Miami, FL, USA), December 2010.
67. Onur Altintas, Mitsuhiro Nishibori, Rama Vuyyuru, Youhei Fujii, Kota Nishida, Yuji Oie, Kazuya Tsukamoto, Masato Tsuru, Abdulrahman Al-Abbasi, Takeo Fujii, Srikanth Pagadarai, Alexander M. Wyglinski. “Implementation and Evaluation of Distributed Control and Data Channel Coordination Algorithms for V2V Dynamic Spectrum Access.” Proceedings of the SDR Forum (Washington DC, USA), November 2010.
68. Conor Rochford, Michael Ghizzoni, Matthew Kelley, Richard F. Vaz, Alexander M. Wyglinski, Michael Barry, Sean McGrath. “An Energy Spreading Technique for Cognitive Radio Networks.” Proceedings of The Seventh International Symposium on Wireless Communication Systems (York, UK), September 2010.
69. Manh-Hung Le, Dimitris Saragas, Nathan Webb, Richard F. Vaz, Alexander M. Wyglinski, Michael Barry, Sean McGrath. “A Novel Indoor Navigation Approach Employing Motion Statistics.” Proceedings of the IEEE Vehicular Technology Conference – Fall (Ottawa, ON, Canada), September 2010.
70. Sean Ferguson, Fabrice Labeau, Alexander M. Wyglinski. “Compression of Channel State Information for Wireless OFDM Transceivers.” Proceedings of the IEEE Vehicular Technology Conference – Fall (Ottawa, ON, Canada), September 2010.
71. Srikanth Pagadarai, Adrian Kliks, Hanna Bogucka, Alexander M. Wyglinski. “On Non-contiguous Multicarrier Waveforms for Spectrally Opportunistic Cognitive Radio Systems”. Proceedings of the 5th International Waveform Diversity and Design Conference (Niagara Falls, ON, Canada), August 2010.
72. Weichao Wang, Di Pu, Alexander M. Wyglinski. “Detecting Sybil Nodes in Wireless Networks with Physical Layer Network Coding.” Proceedings of the International Conference on Dependable Systems and Networks (Chicago, IL, USA), June 2010.
73. Alexander M. Wyglinski, Richard F. Vaz, John A. McNeill, Donald R. Brown III, and Fred J. Looft III. “Conducting Electrical and Computer Engineering Capstone Design Projects Abroad: The Limerick Experience.” Proceedings of the 2010 Capstone Design Conference (Boulder, CO, USA), June 2010.

74. Si Chen, Timothy R. Newman, Joseph B. Evans, Alexander M. Wyglinski. “Genetic Algorithm-Based Optimization for Cognitive Radio Networks”. Proceedings of the 2010 IEEE Sarnoff Symposium (Princeton, NJ, USA), April 2010. (INVITED)
75. Srikanth Pagadarai, Alexander M. Wyglinski, and Rama Vuyyuru. “Characterization of Vacant UHF TV Channels for Vehicular Dynamic Spectrum Access.” Proceedings of the First IEEE Vehicular Networking Conference (Tokyo, Japan), October 2009.
76. Michael Bruno, Peter Perreault, Matthew Murdy, John A. McNeill, Alexander M. Wyglinski. “Widely Tunable RF Transceiver Front End for Software-Defined Radio.” Proceedings of the 2009 Military Communications Conference (Boston, MA, USA), October 18, 2009.
77. Zhou Yuan, Srikanth Pagadarai, Alexander M. Wyglinski. “Feasibility of NC-OFDM Transmission in Dynamic Spectrum Access Networks.” Proceedings of the 2009 Military Communications Conference (Boston, MA, USA), October 18, 2009.
78. Zhou Yuan and Alexander M. Wyglinski. “Cognitive Radio-Based OFDM Sidelobe Suppression Employing Modulated Filter Banks and Cancellation Carriers.” Proceedings of the 2009 Military Communications Conference (Boston, MA, USA), October 18, 2009.
79. Chittabrata Ghosh, Si Chen, Dharma P. Agarwal, and Alexander M. Wyglinski. “Priority-based Spectrum Allocation for Cognitive Radio Networks Employing NC-OFDM Transmission.” Proceedings of the 2009 Military Communications Conference (Boston, MA, USA), October 18, 2009.
80. Yue Wang, Jingkai Su, Islam I. Hussein, and Alexander M. Wyglinski. “Price-Based Information Routing in Complex Satellite Networks for Space-Based Situational Awareness.” Proceedings of the Advanced Maui Optical and Space Surveillance Technologies Conference (Maui, HI, USA), September, 2009.
81. Chittabrata Ghosh, Srikanth Pagadarai, Dharma P. Agarwal, and Alexander M. Wyglinski. “Queuing Theory Representation and Modeling of Spectrum Occupancy Employing Radio Frequency Measurements.” Proceedings of the IEEE Vehicular Technology Conference (Anchorage, AK, USA), September 20, 2009.
82. Di Pu, Alexander M. Wyglinski, and Mike McLernon. “A Frequency Rendezvous Approach for Decentralized Dynamic Spectrum Access Networks.” Proceedings of the International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Hannover, Germany), June 22, 2009.
83. Srikanth Pagadarai and Alexander M. Wyglinski. “A Quantitative Assessment of Wireless Spectrum Measurements for Dynamic Spectrum Access.” Proceedings of the International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Hannover, Germany), June 22, 2009.
84. Si Chen and Alexander M. Wyglinski. “Cognitive Radio-Enabled Distributed Cross-Layer Optimization Via Genetic Algorithms.” Proceedings of the International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Hannover, Germany), June 22, 2009.
85. Zhou Yuan, Srikanth Pagadarai, and Alexander M. Wyglinski. “Sidelobe Suppression of OFDM Transmissions using Genetic Algorithm Optimization.” Proceedings of the IEEE Military Communications Conference (San Diego, CA, USA), November 2008.
86. Srikanth Pagadarai and Alexander M. Wyglinski. “A Sub-optimal Sidelobe Suppression Technique for OFDM-based Cognitive Radios.” Proceedings of the IEEE Military Communications Conference (San Diego, CA, USA), November 2008.

87. Srikanth Pagadarai and Alexander M. Wyglinski. “Novel Sidelobe Suppression Technique for OFDM-Based Cognitive Radio Transmission.” Proceedings of the IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (Chicago, IL, USA), October 2008.
88. Mika Husso, Riku Jantti, Jyri Hamalainen, and Alexander M. Wyglinski. “Adaptive Antennas and Dynamic Spectrum Management for Femtocellular Networks.” Proceedings of the IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (Chicago, IL, USA), October 2008.
89. Ronan Farrell, Rudi Villing, Alexander M. Wyglinski, Christopher R. Anderson, Jeffrey H. Reed, Philip Balister, Chris Phelps, Tom Tsou, Joseph Gaeddert, Carlos Aguayo, Sven Bilen, George Nychis, Behrouz Farhang-Boroujeny, Neil Patwari, John Chapin, Jean-Christophe Schiel, Francois Montaigne. “Rationale for a Clean Slate Radio Architecture.” Proceedings of the SDR Forum Technical Conference (Washington DC, USA), October 2007 (INVITED).
90. Si Chen and Alexander M. Wyglinski. “Distributed Optimization of Cognitive Radios Employed in Dynamic Spectrum Access Networks.” Proceedings of the Fifth Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks – Workshop on Software Defined Radio (San Francisco, CA, USA), June 2008 (INVITED).
91. Srikanth Pagadarai, Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. “Sidelobe Suppression for OFDM-Based Cognitive Radios Using Constellation Expansion.” Proceedings of the IEEE Wireless Communications and Networking Conference (Las Vegas, NV, USA), April 2008.
92. Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. “OFDM Symbol Design for Peak-to-Average Power Ratio Reduction Employing Non-Data Bearing Subcarriers.” Proceedings of the IEEE Wireless Communications and Networking Conference (Las Vegas, NV, USA), April 2008.
93. Jordan D. Guffey, Alexander M. Wyglinski, and Gary J. Minden. “Agile Radio Implementation of OFDM Physical Layer for Dynamic Spectrum Access Research.” Proceedings of the IEEE Global Telecommunications Conference (Washington DC, USA), November 2007.
94. Qi Chen, Alexander M. Wyglinski, and Gary J. Minden. “Frequency Agile Interference-Aware Channel Sounding for Dynamic Spectrum Access Networks.” Proceedings of the IEEE Global Telecommunications Conference (Washington DC, USA), November 2007.
95. Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. “Peak-to-Average Power Ratio Analysis for NC-OFDM Transmissions.” Proceedings of the IEEE Vehicular Technology Conference (Baltimore, MD, USA), September 2007.
96. Timothy Newman, Rakesh Rajbanshi, Alexander M. Wyglinski, Joseph B. Evans, and Gary J. Minden. “Population Adaptation for Genetic Algorithm-based Cognitive Radios.” Proceedings of the Second International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Orlando, FL, USA), August 2007.
97. Vinaykumar Muralidharan, Alexander M. Wyglinski, and Weichao Wang. “HiFi-WiN: Hybrid Integrated Fiber-Wireless Networking for Broadband Metropolitan Area Access.” Proceedings of the 2007 Virginia Tech Symposium on Wireless Personal Communications (Blacksburg, VA, USA), June 2007.
98. Dinesh Datla, Alexander M. Wyglinski, and Gary J. Minden. “A Statistical Approach to Spectrum Measurement Processing.” Proceedings of the 2007 Virginia Tech Symposium on Wireless Personal Communications (Blacksburg, VA, USA), June 2007.
99. Rakesh Rajbanshi, Victor R. Petty, Dinesh Datla, Frederick Weidling, Daniel DePardo, Paul J. Kolodzy, Michael. J. Marcus, Alexander M. Wyglinski, Joseph B. Evans, Gary J. Minden, and

James A. Roberts. “Feasibility Study of Dynamic Spectrum Access in Underutilized Television Bands.” Proceedings of the Second IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (Dublin, Ireland), April 2007.

100. Gary J. Minden, Joseph B. Evans, Leon Searl, Daniel DePardo, Victor R. Petty, Rakesh Rajbanshi, Jordan Guffey, Qi Chen, Timothy Newman, Frederick Weidling, Dinesh Datla, Brett Barker, Megan Peck, Brian Cordill, Alexander M. Wyglinski, and Arvin Agah. “KUAR: A Flexible Software-Defined Radio Development Platform.” Proceedings of the Second IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (Dublin, Ireland), April 2007.

101. Dinesh Datla, Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. “Parametric Adaptive Spectrum Sensing Framework for Dynamic Spectrum Access Networks.” Proceedings of the Second IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (Dublin, Ireland), April 2007.

102. Rakesh Rajbanshi, Qi Chen, Alexander M. Wyglinski, Gary J. Minden, and Joseph B. Evans. “Quantitative Comparison of Agile Modulation Techniques for Cognitive Radio Transceivers.” Proceedings of the IEEE Consumer Communications and Networking Conference – Workshop on Cognitive Radio Networks (Las Vegas, NV, USA), January 2007.

103. Gregory D. Troxel, Eric Blossom, Steve Boswell, Micah Brodsky, Armando Caro, Isidro Castineyra, Alex Colvin, Tad Dreier, Joseph B. Evans, Nick Goffee, Karen Haigh, Talib Hussain, Vikas Kawadia, David Lapsley, Carl Livadas, Alberto Medina, Joanne Mikkelson, Gary J. Minden, Robert Morris, Craig Partridge, Vivek Raghunathan, Ram Ramanathan, Cesar Santivanez, Thomas Schmid, Dan Sumorok, Mani Srivastava, Bob Vincent, David Wiggin, Alexander M. Wyglinski, and Sadaf Zahedi. “Adaptive Dynamic Radio Open-source Intelligent Team (ADROIT): Cognitively-controlled Collaboration among SDR Nodes.” Proceedings of the IEEE Communications Society Conference on Sensors, Mesh and Ad Hoc Communications and Networks (SECON) – Workshop on Networking Technologies for Software-Defined Radio Networks (Reston, VA, USA), August 2006 (INVITED).

104. Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. “Subcarrier Power Adjustment Technique for Peak-to-Average Power Ratio Reduction for OFDM-based Cognitive Radios.” Proceedings of the IEEE Military Communications Conference (Washington, DC, USA), August 2006.

105. Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. “Adaptive-Mode Peak-to-Average Power Ratio Reduction Algorithm for OFDM-based Cognitive Radios.” Proceedings of the 64th IEEE Vehicular Technology Conference – Fall (Montreal, QC, Canada), September 2006.

106. Alexander M. Wyglinski. “Antenna Subset Selection with Bit Allocation for Multicarrier Spatial Diversity Transceivers.” Proceedings of the 64th IEEE Vehicular Technology Conference – Fall (Montreal, QC, Canada), September 2006.

107. Alexander M. Wyglinski. “Effects of Bit Allocation on Non-contiguous Multicarrier-based Cognitive Radio Transceivers.” Proceedings of the 64th IEEE Vehicular Technology Conference – Fall (Montreal, QC, Canada), September 2006.

108. Rakesh Rajbanshi, Qi Chen, Alexander M. Wyglinski, Joseph B. Evans, and Gary J. Minden. “Comparative Study of Frequency Agile Data Transmission Schemes for Cognitive Radio Transceivers.” Proceedings of the First International Workshop on Technology and Policy for Accessing Spectrum (Boston, MA, USA), July 2006.

109. Rakesh Rajbanshi, Alexander M. Wyglinski, and Gary J. Minden. “An Efficient Implementation of NC-OFDM Transceivers for Cognitive Radios.” Proceedings of the 1st International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Mykonos Island, Greece), June 2006.
110. Martin Cudnoch, Alexander M. Wyglinski, and Fabrice Labeau. “DSP Implementation of an Efficient Bit Allocation Algorithm for Indoor Wireless Multicarrier Systems.” Proceedings of the 2006 IEEE Wireless Communications and Networking Conference (Las Vegas, NV, USA), April 2006.
111. Alexander M. Wyglinski, Peter Kabal, and Fabrice Labeau. “BER-Constrained Loading Algorithms for Multicarrier Spatial Diversity Systems.” Proceedings of the 62nd IEEE Vehicular Technology Conference – Fall (Dallas, TX, USA), September 2005.
112. Alexander M. Wyglinski, Martin Cudnoch, Fabrice Labeau, and Peter Kabal. “Practical Termination Strategies for Subcarrier Equalizer Tap Loading Algorithms.” Proceedings of the 62nd IEEE Vehicular Technology Conference – Fall (Dallas, TX, USA), September 2005.
113. Alexander M. Wyglinski, Fabrice Labeau, and Peter Kabal. “Loading Algorithms for Multicarrier Spatial Diversity Systems employing Antenna Subset Selection.” Proceedings of the 2005 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing (Victoria, BC, Canada), Pgs. 490-493, August 2005.
114. Alexander M. Wyglinski, Fabrice Labeau, and Peter Kabal. “Effects of Imperfect Subcarrier SNR Information on Adaptive Bit Loading Algorithms for Multicarrier Systems.” Proceedings of the IEEE Global Telecommunications Conference (Dallas, TX, USA), Vol. 6, Pgs. 3835-3839, November 2004.
115. Alexander M. Wyglinski, Peter Kabal, and Fabrice Labeau. “Variable-Length Subcarrier Equalizers for Multicarrier Systems.” Proceedings of the 60th IEEE Vehicular Technology Conference – Fall (Los Angeles, CA, USA), Vol. 1, Pgs. 394-398, September 2004.
116. Alexander M. Wyglinski, Fabrice Labeau, and Peter Kabal. “An Efficient Bit Allocation Algorithm for Multicarrier Modulation.” Proceedings of the IEEE Wireless Communications and Networking Conference (Atlanta, GA, USA), Vol. 2, Pgs. 1194-1199, March 2004.
117. Alexander M. Wyglinski, Peter Kabal, and Fabrice Labeau. “Adaptive Bit and Power Allocation for Indoor Wireless Multicarrier Systems.” Proceedings of the 15th International Conference on Wireless Communications (Calgary, AB, Canada), Pgs. 500-508, July 2003.
118. Alexander M. Wyglinski, Peter Kabal, and Fabrice Labeau. “Adaptive Filterbank Mulitcarrier Wireless Systems for Indoor Environments.” Proceedings of the 56th IEEE Vehicular Technology Conference – Fall (Vancouver, BC, Canada), Pgs. 336-340, September 2002.
119. Alexander M. Wyglinski and Steven D. Blostein . “Mutual Coupling and Scattering Effects on Cellular CDMA Systems using Smart Antennas.” Proceedings of the 52nd IEEE Vehicular Technology Conference – Fall (Boston, MA, USA), Vol. 4, Pgs. 1656 -1662, September 2000.
120. Alexander M. Wyglinski and Steven D. Blostein. “Antenna Array Mutual Coupling Effects on Cellular CDMA Communication Systems.” Proceedings of the Queen’s 20th Biennial Symposium on Communications (Kingston, ON, Canada), Pgs. 181-185, May 2000.
121. Brian A. Lepine, Brian P. Wallace, David S. Forsyth, Alex Wyglinski. “Pulsed Eddy Current Method Developments for Hidden Corrosion Detection in Aircraft Structures.” Proceedings of the 1st Pan-American Conference for Non-destructive Testing (Toronto, ON, Canada), Pgs. 118-124, September 1998.

Conference Papers (Non-Peer-Reviewed)

1. Steven Olivieri, Alexander M. Wyglinski, L. Howard Pollard, Jim Aarestad, Craig Kief. "Responsive Satellite Communications via FPGA-Based Software-Defined Radio for SPA-U Compatible Platforms", Proceedings of ReSpace/MAPLD Conference (Albuquerque, NM, USA), November 2010.
2. Srikanth Pagadarai, Alexander M. Wyglinski. "Measuring and Modeling Spectrum Occupancy: A Massachusetts Perspective." Proceedings of the 2010 International Symposium on Advance Radio Technologies (Boulder, CO, USA), July 2010. (INVITED)

Invited Talks, Seminars, Colloquia, Tutorials

1. Alexander M. Wyglinski. "On Beamforming and Bumblebees: Connecting Vehicles Together." IEEE Vehicular Technology Society – New Zealand North Chapter, 6 July 2020.
2. Alexander M. Wyglinski. "Advanced Waveform Design and Prototyping using Software-Defined Radio." Idaho National Laboratory Invited Talk, August 2019.
3. Alexander M. Wyglinski. "Space Communications: Wireless Connectivity That Is Out Of This World." ICED Epic Challenge – Nipmuc Regonal High School, November 2019.
4. Alexander M. Wyglinski. "Making Self-Driving Cars Safer." NOVA Science Cafe, 22 October 2019.
5. Alexander M. Wyglinski. "Bumblebees and Vehicular Networking: Intelligent Connectivity on the Road." Boston University CISE Seminar, 5 October 2018.
6. Alexander M. Wyglinski. "Cognitive Radio-Based Space Communications via Machine Learning." NASA Glenn Research Center — Communications and Intelligent Systems Division Distinguished Technical Lecture Series, 6 December 2018.
7. Alexander M. Wyglinski. "Bumblebees and Vehicular Networking: Intelligent Connectivity on the Road." Qualcomm Seminar Series, 13 December 2018.
8. Alexander M. Wyglinski. "Deep-Learning and Cognitive Radio: Making Wireless Smarter." Queen's University ECE Distinguished Seminar Series, 8 March 2018.
9. Alexander M. Wyglinski. "Bumblebees and Vehicular Networking: Intelligent Connectivity on the Road." University of Massachusetts Boston Engineering Seminar Series, 2 November 2018.
10. Alexander M. Wyglinski. "Impact of Environmental Information on the Control of Self-Driving Cars" at 3rd IEEE VTS Connected and Autonomous Vehicle Summer School at WPI, 20 August 2018.
11. Alexander M. Wyglinski. "Bumblebees and Beamforming — Enabling the Vehicular Internet-of-Things" at WiFiUS Summer School on Wireless Challenges in the Internet of Things, 13-14 June 2018.
12. Alexander M. Wyglinski. "IEEE Guide to Autonomous Vehicle Technology" on 8 November 2018.
13. Alexander M. Wyglinski. "Advanced Waveform Design and Cognitive Radio: Prototyping using Software-Defined Radio." IEEE Vehicular Technology Society Distinguished Speaker Presentation – Swinburne University of Technology (Melbourne, Australia), 5 June 2017.
14. Alexander M. Wyglinski. "Advanced Waveform Design and Cognitive Radio: Prototyping using Software-Defined Radio." IEEE Vehicular Technology Society Distinguished Speaker Presentation – Macquarie University (Sydney, Australia), 7 June 2017.
15. Alexander M. Wyglinski. "The Future of Autonomous Vehicles: A System of Systems Viewpoint." 6th Annual Boston Premier CIO Forum (Waltham, MA, USA), 21 March 2017.
16. Alexander M. Wyglinski. "The Future of Self-Driving Cars: Autonomy, Connectivity, and Bumblebees." Harvard Longwood IT Day (Boston, MA, USA), 30 October 2017.

17. Alexander M. Wyglinski. “Deep-Learning and Cognitive Radio: Making Wireless Smarter.” Queen’s University ECE Distinguished Seminar Series (Kingston, Canada), 8 March 2018.
18. Alexander M. Wyglinski. “Autonomous Cars.” Electronic Design Innovation Conference (EDICON) Panel (Boston, MA, USA), 12 September 2017.
19. Alexander M. Wyglinski. “Understanding Connected Vehicles.” International Summer School on Energetic Efficiency of Connected Vehicles (University of Quebec at Trois Rivieres), 28 June 2017.
20. Alexander M. Wyglinski. “MassRides: The Future of the Commute.” MassRides Panel Discussion & Workshop (Worcester, MA, USA), 15 June 2017.
21. Alexander M. Wyglinski. “Advanced Waveform Design and Cognitive Radio: Prototyping using Software-Defined Radio.” Invited Talk at SRC Inc (Syracuse, NY, USA), 17 March 2017.
22. Alexander M. Wyglinski. “Understanding Connected Vehicles” at the International Summer School on Energetic Efficiency of Connected Vehicles, which was located at the University of Quebec at Trois Rivieres on 28 June 2017.
23. Alexander M. Wyglinski. “Biology Meets Cognitive Radio – Using Nature to Make Good Decisions.” KEYNOTE PRESENTATION – IEEE International Symposium on Wireless Communication Systems (Poznan, Poland), September 2016.
24. Alexander M. Wyglinski. “Wireless Spectrum, Security, and Cognitive Radio.” BAE Systems – ARIES Seminar Series, May 2016.
25. Alexander M. Wyglinski. “Digitized Vehicular Technology – Connectivity, Autonomy, and Security.” US Department of Transportation – Volpe National Transportation Systems Center, June 2016.
26. Alexander M. Wyglinski. “Biology Meets Cognitive Radio – Using Nature to Make Good Decisions.” IEEE Worcester County Section, December 2016.
27. Alexander M. Wyglinski. “Intelligently Connected Vehicles: When The Information Highway Meets The Road.” UMass Boston Engineering Colloquium, May 2016.
28. Alexander M. Wyglinski, Haris Gacacin. “Understanding Key Technologies for Customer Experience Management in 5G.” Half-Day Tutorial, IEEE Global Communications Conference, December 2016.
29. Alexander M. Wyglinski. “Introduction to Cognitive Radio – Part 1: Fundamental Concepts and Spectrally Agile Waveforms.” IEEE VTS Distinguished Lecturer Presentation, Host: IEEE New Jersey Chapter, August 2016.
30. Alexander M. Wyglinski. “Introduction to Cognitive Radio – Part 2: Software Defined Radio Technology, Implementation Approaches, and Prototype Systems.” IEEE VTS Distinguished Lecturer Presentation, Host: IEEE New Jersey Chapter, August 2016.
31. Alexander M. Wyglinski, Le Wang, Renato Iida. “DSRC and WAVE – Technologies that Drive Vehicular Connectivity.” Half-Day Lecture, IEEE VTS Connected & Autonomous Vehicle Summer School @ WPI, July 2016.
32. Alexander M Wyglinski. “Performance Analysis for High-Velocity Connected Vehicles.” 81st IEEE Vehicular Technology Conference, May 2015.
33. Alexander M Wyglinski. “Interference Performance Evaluation of Secondary Users in Cognitive Radio Networks.” 81st IEEE Vehicular Technology Conference, May 2015.

34. Alexander M Wyglinski. “Vehicular Communications and Networks Employing Cognitive Radio.” KEYNOTE PRESENTATION, Third IEEE International Workshop on Emerging COgnitive Radio Applications and aLgorithms, June 2015.
35. Alexander M Wyglinski. “Connected Vehicles: When The Information Highway Hits The Asphalt.” TEDxWPI Presentation, March 2015.
36. Travis Collins, Alexander M. Wyglinski. “Enabling Security in Cognitive Radio and Wireless Spectrum.” Tutorial Presentation at IEEE MILCOM, October 2014.
37. Bengi Aygun, Alexander M Wyglinski. “Channel Modeling of Decode-and-Forward Relaying VANETs.” Proceedings of the 80th IEEE Vehicular Technology Conference, September 2014.
38. Travis Collins, Alexander M. Wyglinski. “Enabling Security in Cognitive Radio and Wireless Spectrum.” MITRE College Lecture Series, May 2014.
39. Alexander M. Wyglinski. “Connected Vehicles: When The Information Highway Hits The Asphalt.” WPI Mechanical Engineering Seminar Series, March 2014.
40. Alexander M Wyglinski. “Vehicular Communications and Networks Employing Cognitive Radio.” IEEE VTS Distinguished Lecturer Presentation, Host: IEEE VTS Santa Clara Valley Chapter, October 2014.
41. Alexander M Wyglinski. “Spectrally Agile Waveforms for Dynamic Spectrum Access.” IEEE VTS Distinguished Lecturer Presentation, Host: IEEE VTS Sacramento Chapter, October 2014.
42. Alexander M Wyglinski. “Software Defined Radio and Cognitive Radio Implementations and Test-Beds.” IEEE VTS Distinguished Lecturer Presentation, Host: IEEE VTS San Diego Chapter, October 2014.
43. Alexander M. Wyglinski. “Cognitive Radio: Enabling Seamless Connectivity in an Increasingly Wireless World.” University of British Columbia – Invited Presentation (Vancouver, BC, Canada), 1 May 2013.
44. Alexander M. Wyglinski. “Software-Defined Radio: A Game Changer for Enabling Wireless Networking and Communications.” University of Washington – Invited Presentation (Seattle, WA, USA), 30 April 2013.
45. Alexander M. Wyglinski. “Software-Defined Radio and Spectrally Agile Waveform Design.” Tampere University of Technology – Invited Presentation (Tampere, Finland), 10 June 2013.
46. Alexander M. Wyglinski, Hanna Bogucka, Friedrich Jondral. ““Do-It-Yourself” Spectrally Agile Waveform Design: Implementing Dynamic Spectrum Access in 24 Hours.” IEEE International Conference on Communications – Half-Day Tutorial (Budapest, Hungary), 13 June 2013.
47. Alexander M. Wyglinski. “Vehicular Communications and Networks Employing Cognitive Radio.” Ghent University – IEEE VTS Distinguished Lecture Presentation (Ghent, Belgium), 4 June 2013.
48. Alexander M. Wyglinski. “Spectrally Agile Waveforms for Dynamic Spectrum Access.” University of Luxembourg – IEEE VTS Distinguished Lecture Presentation (Luxembourg), 5 June 2013.
49. Alexander M. Wyglinski. “Software Defined Radio and Cognitive Radio Implementations & Test-Beds.” University of Twente – IEEE VTS Distinguished Lecture Presentation (Enchede, Netherlands), 6 June 2013.
50. Alexander M. Wyglinski. “Cognitive Radio: Enabling Seamless Connectivity in an Increasingly Wireless World.” Tufts ECE Departmental Seminar (Medford, MA, USA), 20 November 2012.
51. Alexander M. Wyglinski, R. J. Linton*. “Securing Autonomous Systems.” IDGA Military Robotics Summit 2012 (Alexandria, VA, USA), 27 August 2012.

52. Alexander M. Wyglinski. “Cognitive Radio: A Panacea for RF Spectrum Scarcity.” IEEE Vehicular Technology Society Distinguished Lecturer Presentation – United Kingdon/Republic of Ireland Chapter (Dublin, Ireland), 26 July 2012.
53. Alexander M. Wyglinski. “Cognitive Radio: A Panacea for RF Spectrum Scarcity.” MITRE Corporation Seminar (Bedford, MA, USA), 15 May 2012.
54. Alexander M. Wyglinski. “Understanding Wireless Spectrum for Cognitive Radio Transmission.” IDGA Cognitive Radio Summit (Washington DC, USA), 27 February 2012 (INVITED).
55. Alexander M. Wyglinski. “Energy-Conscious Prototype for Enabling Multi-Protocol Wireless Communications.” 35th IEEE Sarnoff Symposium (Newark, NJ, USA), May 2012.
56. Alexander M. Wyglinski. “Estimation of Spectrum Occupancy in Heterogeneous Radio Access Environments using Random Spectral Sampling.” 35th IEEE Sarnoff Symposium (Newark, NJ, USA), May 2012.
57. Alexander M. Wyglinski. “Modular FPGA-Based Software Defined Radio for CubeSats.” 2012 IEEE International Conference on Communications (Ottawa, ON, Canada), June 2012.
58. Alexander M. Wyglinski. “Learning-Based Channel Selection of VDSA Networks in Shared TV Whitespace.” 76th IEEE Vehicular Technology Conference (Quebec City, QC, Canada), September 2012.
59. Alexander M. Wyglinski. “Research Methods in Electrical and Computer Engineering: Tips from the Trenches.” WPI ECE Graduate Seminar (Worcester, MA, USA), 26 January 2012.
60. Alexander M. Wyglinski, Hanna Bogucka, Friedrich Jondral. “Do-It-Yourself” Spectrally Agile Waveform Design: Implementing Dynamic Spectrum Access in 24 Hours.” Half-Day Tutorial Presentation at 2013 IEEE International Conference on Communications (Budapest, Hungary), June 2013.
61. Alexander M. Wyglinski. “Understanding Wireless Spectrum for Secondary Access.” Microsoft Research Seminar (Redmond, WA, USA), 29 April 2013.
62. Alexander M. Wyglinski. “Software-Defined Radio: An Educational and Research Tool.” University of Washington (Seattle, WA, USA), 30 April 2013.
63. Alexander M. Wyglinski. “Vehicular Communications and Networks Employing Cognitive Radio.” IEEE Vehicular Technology Society Distinguished Lecturer Presentation – Benelux Chapter (Ghent, Belgium), 4 June 2013.
64. Alexander M. Wyglinski. “Spectrally Agile Waveforms for Dynamic Spectrum Access.” IEEE Vehicular Technology Society Distinguished Lecturer Presentation – Benelux Chapter (Luxembourg), 5 June 2013.
65. Alexander M. Wyglinski. “Software Defined Radio and Cognitive Radio Implementations & Test-Beds.” IEEE Vehicular Technology Society Distinguished Lecturer Presentation – Benelux Chapter (Twente, The Netherlands), 6 June 2013.
66. Alexander M. Wyglinski. “Cognitive Radio: A Panacea for RF Spectrum Scarcity.” BAE Systems Seminar (Burlington, MA, USA), 2 July 2012.
67. Alexander M. Wyglinski. “Modular FPGA-Based Software Defined Radio for CubeSats.” NEWSDR’12 Presentation (Boston, MA, USA), 11 May 2012.
68. Alexander M. Wyglinski. “Getting Started with Your Research at WPI: A Junior Faculty Perspective.” WPI OSP Workshop for Junior Faculty (Worcester, MA, USA), 19 September 2012.
69. Alexander M. Wyglinski. “Understanding Wireless Spectrum for Cognitive Radio Transmission.” IDGA Cognitive Radio Summit (Washington DC, USA), 27 February 2012 (INVITED).

70. Alexander M. Wyglinski. “Getting Started with Your Research at WPI.” WPI Engineering General Meeting (Worcester, MA, USA), 11/30/2011.
71. Alexander M. Wyglinski. “Adventures in Measuring Wireless Signals.” Paxton Senior Men’s Group (Paxton, MA, USA), 11/30/2011.
72. Alexander M. Wyglinski. “Enabling Vehicular Dynamic Spectrum Access Networks via Cognitive Radio Communications”. Northeastern University ECE Seminar Series (Boston, MA, USA), 20 October 2011.
73. Alexander M. Wyglinski. “Using SDR for Hands-On Digital Communication Systems Engineering Education.” First New England Workshop on Software-Defined Radio – NEWSDR’11 (Boston, MA, USA), 1 October 2011.
74. Alexander M. Wyglinski. “Getting Started with Your Research at WPI: A Junior Faculty Perspective”. WPI Office of Sponsored Projects Workshop on Grant Application Process (Worcester, MA, USA), 22 September 2011.
75. Alexander M. Wyglinski. “Cognitive Radio: How to handle the wireless equivalent of “yadda, yadda, yadda”?” WPI ECE Graduate Seminar (Worcester, MA, USA), 22 September 2011.
76. Friedrich Jondral, Alexander M. Wyglinski. “From Maxwell’s Equations to Overlay Systems: How Cognitive Radios Will Change Communications”. Half-Day Tutorial, 2011 IEEE International Conference on Communications (Kyoto, Japan), June 9, 2011.
77. Alexander M. Wyglinski, Hanna Bogucka, Adrian Kliks, Srikanth Pagadarai. “Non-Contiguous Multicarrier Transmission for Spectrally Opportunistic Wireless Access: Design Decisions and Trade-Offs”. Half-Day Tutorial, 2011 IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks (Aachen, Germany), May 2011.
78. Alexander M. Wyglinski. “Cognitive Radio: Pushing the Limits of Wireless Networks.” WPI Electrical and Computer Engineering Graduate Seminar, January 13, 2011.
79. Alexander M. Wyglinski, Devin Kelly. “Communication Systems Design Using Software-Defined Radio.” Two-Day Non-Credit WPI Corporate and Professional Education Short Course for BAE Systems (Worcester, MA, USA), November 18-19, 2010.
80. Alexander M. Wyglinski. “Software Defined Radio for Enabling Design and Innovation”, Half-Day Short Course, Configurable Space Microsystems Innovations & Applications Center (Albuquerque, NM, USA), July 30, 2010.
81. Alexander M. Wyglinski. “Cognitive Radio Communications for Enabling Dynamic Spectrum Access”, Half-Day Short Course, 2010 Wireless Symposium at Virginia Tech (Blacksburg, VA, USA), June 2-4, 2010.
82. Alexander M. Wyglinski. “Cognitive Radio Communications and Dynamic Spectrum Access.” Two-Day Short Course, INFORTE Programme – EU European Social Fund (Helsinki, Finland), November 26-27, 2009.
83. Alexander M. Wyglinski. “Cognitive Radio: Pushing the Limits of Wireless Networks.” WPI Electrical and Computer Engineering Graduate Seminar (Worcester, MA, USA), January 13, 2011.
84. Alexander M. Wyglinski. “Applications of Cognitive Radio to Vehicular and Satellite Communications”. Department of Electrical and Computer Engineering graduate Seminar, University of New Hampshire (Durham, NH, USA), November 30, 2010.
85. Alexander M. Wyglinski, Mark McHenry, Matthew Hussey, Petri Mahonen, Frank Sanders, Alistair Massarella. “Measuring Spectrum Occupancy.” Panel Session at 2010 International Symposium on Advanced Radio Technologies (Boulder, CO, USA), July 28, 2010.

86. Alexander M. Wyglinski. “Harnessing Transmission Agility in Programmable Wireless Communication Systems.” Invited Presentation at the Air Force Research Laboratory – Space Vehicles Directorate (Albuquerque, NM, USA), July 26, 2010.
87. Fred Looft, Fred Hart, Jeannine Plummer, Yinming Rong, Alexander M. Wyglinski. “International Capstone Design Experiences”, Panel Session at the 2010 Capstone Design Conference (Boulder, CO, USA), June 9, 2010.
88. Alexander M. Wyglinski. “Understanding Wireless Spectrum Occupancy and Transmission Agility.” University of Colorado at Boulder CS Seminar Series (Boulder, CO, USA), June 8, 2010.
89. Alexander M. Wyglinski. “Quantification, Modeling and Efficient Utilization of Wireless Spectrum.” University of Kansas ITTC/EECS Seminar Series (Lawrence, KS, USA), May 27, 2010.
90. Alexander M. Wyglinski. “Frequency Agile Wireless Transmission: Exploring Spectral Whitespaces.” WPI Wireless Association Invited Talk (Worcester, MA, USA), February 23, 2010.
91. Alexander M. Wyglinski. “Cognitive Radio: Enabling Agility in Modern Wireless Communication Systems.” Department of Electrical and Computer Engineering Seminar Series, Boston University (Boston, MA, USA), March 3, 2010.
92. Alexander M. Wyglinski. “Transmission Agility in Cognitive Radio Systems.” Centre for Telecommunications Value-Chain Research Seminar Series, Trinity College Dublin (Dublin, Ireland), August 14, 2009.
93. Alexander M. Wyglinski. “In Search of Wireless Spectrum: Surveying and Characterizing Unoccupied Radio Frequency Bandwidth.” Centre for Advanced Systems & Technologies in Communications (SytaCOM) Seminar Series (Montreal, QC, Canada), June 15, 2009.
94. Alexander M. Wyglinski. “Wireless Spectrum: Measurement Studies, Occupancy Characterization, and Opportunistic Access.” IEEE Communications Society – Rochester Chapter Seminar Series (Rochester, NY, USA), June 9, 2009.
95. Alexander M. Wyglinski. “Enabling Efficient Wireless Spectrum Utilization via Cognitive Radio.” University of New Mexico Electrical and Computer Engineering Colloquium Series (Albuquerque, NM, USA), April 24, 2009.
96. Alexander M. Wyglinski. “Agile Wireless Communications and Networking Employing Cognitive Radio Systems.” University of Connecticut Electrical and Computer Engineering/Computer Science and Engineering Joint Colloquium Series (Storrs, CT, USA), March 27, 2009.
97. Alexander M. Wyglinski. “Intelligent Wireless Devices: Automating Network Connectivity”. Central Mass Roundtable Seminar for High School Educators (Worcester, MA, USA), September 18, 2008.
98. Alexander M. Wyglinski. “Making Cognitive Radios Think: Genetic Algorithms and Intelligent Wireless Systems”. UMass Boston Department of Computer Science Seminar Series (Boston, MA, USA), October 30, 2008.
99. Alexander M. Wyglinski. “Agile High-Speed Wireless Transmission Techniques for Software Defined Radio Systems”. Collaborative International Software-Defined Radio Workshop (Maynooth, Ireland), May 2008.
100. Alexander M. Wyglinski, Xinming Huang. “Dynamically Reconfigurable FPGA-based agile Multicarrier Transceiver Design for Cognitive Radio Communications.” US/DoD Finland/TEKES Workshop on Wireless Networks (Washington DC, USA), March 2008.
101. Alexander M. Wyglinski. “Cognitive Radio To The Rescue! How The Wireless Frontier Will Be Won.” ECE Graduate Seminar Series (Worcester, MA, USA), September 2007.

102. Alexander M. Wyglinski. “Multiple Antennas and Multicarrier Modulation: Enhancing Throughput and Error Robustness Through Adaptive Techniques.” International Workshop on Mobile Wireless Technology and the Impacts on Future Internet (Helsinki, Finland), May 2007.
103. Alexander M. Wyglinski. “Cognitive Radio: A Flexible Wireless Platform for Transceiver Optimization.” International Workshop on Mobile Wireless Technology and the Impacts on Future Internet (Helsinki, Finland), May 2007.
104. Alexander M. Wyglinski. “Kansas University Agile Radio (KUAR) Project Overview.” International Workshop on Mobile Wireless Technology and the Impacts on Future Internet (Helsinki, Finland), May 2007.
105. Alexander M. Wyglinski. “Cognitive Radio Communications: Agile and Flexible Wireless Access.” International Workshop on Mobile Wireless Technology and the Impacts on Future Internet (Stockholm, Sweden), May 2007.
106. Alexander M. Wyglinski. “Agile Transmission Techniques for Cognitive Radio Communications.” Texas Instruments Seminar Series (Dallas, TX, USA), March 2007.
107. Alexander M. Wyglinski. “Spectrally Efficient and Frequency Agile Wireless Communications.” Worcester Polytechnic Institute – Department of Electrical and Computer Engineering Seminar Series (Worcester, MA, USA), February 2007.
108. Alexander M. Wyglinski. “Agile Transmission Techniques for Dynamic Spectrum Access Networks.” Wright State University – Department of Electrical Engineering Seminar Series (Dayton, OH, USA), Feburary 2007.
109. Alexander M. Wyglinski. “Broadband Access via Hybrid Fiber-Wireless Networking.” Nortel Wireless Forum 15 (Ottawa, ON, Canada), November 2006.
110. Alexander M. Wyglinski. “Cognitive Radio Communications for Dynamic Spectrum Access.” IEEE Montreal Seminar Series (Montreal, QC, Canada), September 2006.
111. Alexander M. Wyglinski. “Cognitive Radio Communications for Dynamic Spectrum Access.” The University of Kansas – Information and Telecommunication Technology Center All-Hands Meeting (Lawrence, KS, USA), September 2006.
112. Alexander M. Wyglinski. “Throughput Enhancement Algorithms for Wireless Access Transceivers.” The University of Kansas – Information and Telecommunication Technology Center Seminar Series (Lawrence, KS, USA), April 2005.

Fellowships, Grants, Contracts, and Gifts

Awards/Grants/Contracts

1. January 2020 – May 2021: PI Wyglinski, “Physical Layer Security of Millimeter Wave Transmissions,” MIT Lincoln Laboratory, $147,898.
2. August 2019 – May 2021: PI Wyglinski, “Machine Learning for Communications,” MIT Lincoln Laboratory, $171,785.
3. July 2019 – June 2021: Co-PI Wyglinski, “CCRI: Planning: Collaborative Research: Towards a Software-defined Industrial Internet of Things (IIoT) Research Infrastructure for Advanced Manufacturing,” National Science Foundation, $29,999.
4. June 2019 – September 2019: PI Wyglinski, “WPI – Wireless Comms Adjacent Analysis,” Battelle Energy Alliance LLC, $36,165.

5. September 2017 - September 2018: PI Wyglinski, “Diversity Characterization of Wireless Channels within Challenged Transmission Environments,” MITRE Corporation, $87,298.
6. September 2017 - December 2018: PI Wyglinski, “CAN: Use of Space Communications and Navigation (SCaN) Testbed: A Communications, Navigation, and Networking Reconfigurable Testbed -- Supplement,” NASA Glenn Research Center, $77,485.
7. August 2017 - December 2017: PI Wyglinski, “CDMA Playback,” BINJ Labs, $7,577.
8. May 2017 - April 2021: Co-PI Wyglinski, "Selective Listening - Control for Connected Autonomous Vehicles in Data-Rich Environments," National Science Foundation, $425,000.
9. February 2017 - April 2017: PI Wyglinski, "High-Speed Satellite Communication Modem Analysis," ORB Analytics, $23,738.
10. November 2016 - January 2017: PI Wyglinski, "A high-speed variable rate PSK satellite modem," ORB Analytics, $23,738.
11. July 2016 - June 2017: PI Wyglinski, "NSF student travel grant for IEEE VTS connected & autonomous vehicles summer school at WPI (VTS CAV '16)," National Science Foundation, $5,000.
12. January 2016 - December 2020: PI Wyglinski, "EARS: Adaptive behavioral responses for dynamic spectrum access-based connected vehicle networks," National Science Foundation, $312,640.00.
13. February 2015 - January 2016: PI Wyglinski, "WiFiUS: Collaborative Research: Future small-cell networks using reconfigurable antennas," National Science Foundation, $90,161.
14. November 2014 - November 2017: PI Wyglinski, "CAN: Use of Space Communications and Navigation (SCaN) Testbed: A Communications, Navigation, and Networking Reconfigurable Testbed," NASA Glenn Research Center, $47,520.
15. November 2014 - January 2015: PI Wyglinski, "Assessment of proposed preamble for next generation broadcast platform," Coherent Logix, $3,140.
16. June 2014- March 2016: PI Wyglinski, "Reconfigurable Wireless Platforms for Spectrally Agile Coexistence," ORB Analytics (NSF STTR Phase II Sub-Award), $224,359.
17. August 2013 - July 2014: PI Wyglinski, "Performance Assessment of Model Driven FPGA Based Software Defined Radio Development," Raytheon, $65,000.
18. September 2012 - March 2013: PI Wyglinski, "FPGA Design of Communication Systems," MIT Lincoln Laboratory, $68,117.
19. June 2012 - July 2013: PI Wyglinski, "Reconfigurable Wireless Platforms for Spectrally Agile Coexistence," ORB Analytics (NSF STTR Phase I Sub-Award), $75,000.
20. January 2012 – August 2012: PI Wyglinski, “FPGA Development for Communication System Prototype,” MIT Lincoln Laboratory, $37,105.
21. August 2010 – July 2011: PI Wyglinski, “Electrospace Measurement, Characterization, and Adaptive Communication,” MIT Lincoln Laboratory, $50,301.
22. January 2010 – December 2010: PI Wyglinski, “Adaptive Satellite Communications via FPGA-Based Software-Defined Radio,” Air Force Research Laboratory – Space Vehicles Directorate (Sub-Award via University of New Mexico), $39,998.
23. November 2009 – April 2011: PI Wyglinski (Co-PI Anderson, US Naval Academy), “BLISS: A Blind Spectrum Separation Approach for Jamming-Resistant Communications,” Office of Naval Research, $196,400.
24. September 2009 – September 2010: PI Wyglinski, “IEEE DySPAN 2010 Student Travel Grant,” National Science Foundation, $10,000.
25. May 2008 – August 2009: PI Wyglinski, “International Workshop on the Future of Mobile Wireless Networking,” National Science Foundation (Subcontract via University of Kansas), $15,229.

26. May 2008 – August 2008: PI Wyglinski, “NeTS-WN: Quantification of Spectrum Availability for Wireless Network Access,” National Science Foundation – Research Experience for Undergraduates (REU) Supplement, $12,000. [Grant w/ Full F&A]
27. September 2007 – September 2009: PI Wyglinski, “NeTS-WN: Quantification of Spectrum Availability for Wireless Network Access,” National Science Foundation, $79,127.
28. March 2007 – March 2008: Co-PI Wyglinski, “Robust Millimeter Wave Metropolitan Mesh Network,” Sprint-Nextel, $195,000.
29. September 2006 – September 2008: Co-PI Wyglinski, “International Workshop on Mobile Wireless Technology and the Impacts on Future Internet,” National Science Foundation, $72,155.
30. October 2005 – September 2006: Co-PI Wyglinski, “Adaptive Distributed Radio Open-Source Intelligent Network,” DARPA (Sub-contract through BBN Technologies), $324,488.

Gifts

1. MathWorks, "Sponsorship of Ninth New England Workshop on Software-Defined Radio," $1,500.
2. National Instruments, "Sponsorship of Ninth New England Workshop on Software-Defined Radio," $1,500.
3. MediaTek, "Sponsorship of Ninth New England Workshop on Software-Defined Radio," $1,500.
4. Analog Devices, "Sponsorship of Ninth New England Workshop on Software-Defined Radio," $1,500.
5. octoScope, "Student Fellowships for Wireless Channel Emulation," $64,000.
6. MathWorks, "Sponsorship of Eighth New England Workshop on Software-Defined Radio," $1,500.
7. National Instruments, "Sponsorship of Eighth New England Workshop on Software-Defined Radio," $1,500.
8. MediaTek, "Sponsorship of Eighth New England Workshop on Software-Defined Radio," $1,500.
9. Analog Devices, "Sponsorship of Eighth New England Workshop on Software-Defined Radio," $1,500.
10. octoScope, "Sponsorship of Eighth New England Workshop on Software-Defined Radio," $1,500.
11. MathWorks, "Sponsorship of Seventh New England Workshop on Software-Defined Radio," $1,500.
12. National Instruments, "Sponsorship of Seventh New England Workshop on Software-Defined Radio," $1,500.
13. MediaTek, "Sponsorship of Seventh New England Workshop on Software-Defined Radio," $1,500.
14. Analog Devices, "Sponsorship of Seventh New England Workshop on Software-Defined Radio," $1,500.
15. MathWorks, "Sponsorship of Sixth New England Workshop on Software-Defined Radio," $1,500.
16. National Instruments, "Sponsorship of Sixth New England Workshop on Software-Defined Radio," $1,500.
17. MediaTek, "Sponsorship of Sixth New England Workshop on Software-Defined Radio," $1,500.
18. Analog Devices, "Sponsorship of Sixth New England Workshop on Software-Defined Radio," $1,500.
19. MathWorks, "Sponsorship of IEEE VTS Connected and Autonomous Vehicle Summer School @ WPI," $7,000.
20. Mathworks, "Connected Vehicles Internet-of-Things," $270,000.
21. Ettus Research, "Twin Rx Music Ref Design," $17,680.

22. Toyota InfoTechnology Center USA, "Practical Wireless Communication Systems Employing Autonomous Learning in Realistic Vehicular Dynamic Spectrum Access Environments," $40,000.
23. MathWorks, "Sponsorship of Fifth New England Workshop on Software-Defined Radio," $1,500.
24. National Instruments, "Sponsorship of Fifth New England Workshop on Software-Defined Radio," $1,500.
25. MediaTek, "Sponsorship of Fifth New England Workshop on Software-Defined Radio," $1,500.
26. Analog Devices, "Interface Framework Development for ADI Hardware and GNU Radio," $32,300.
27. MathWorks, "Sponsorship of Fourth New England Workshop on Software-Defined Radio," $1,500.
28. National Instruments, "Sponsorship of Fourth New England Workshop on Software-Defined Radio," $1,500.
29. MediaTek, "Sponsorship of Fourth New England Workshop on Software-Defined Radio," $1,500.
30. Analog Devices, "Sponsorship of Fourth New England Workshop on Software-Defined Radio," $1,500.
31. Range Networks, "Sponsorship of Fourth New England Workshop on Software-Defined Radio," $1,500.
32. MathWorks, "Sponsorship of Third New England Workshop on Software-Defined Radio," $1,500.
33. National Instruments, "Sponsorship of Third New England Workshop on Software-Defined Radio," $1,500.
34. BeeCube, "Sponsorship of Third New England Workshop on Software-Defined Radio," $1,000.
35. Xilinx, "Sponsorship of Third New England Workshop on Software-Defined Radio," $1,000.
36. Nutaq, "Sponsorship of Third New England Workshop on Software-Defined Radio," $1,500.
37. Mathworks, "Using Simulink and Software-Defined Radio for Wireless Network Identification and Localization", $278,066.
38. Toyota InfoTechnology Center, "Network Capacity and Learning in Vehicular Dynamic Spectrum Access Architectures," $69,500.
39. Naval Research Laboratory, “Time of Arrival-Based Ranging for Localization using an IEEE 802.11-Style Communication System,” $12,500.
40. Toyota InfoTechnology Center, “Viability and Implementation of Vehicular Dynamic Spectrum Access Networks,” $69,500.
41. Toyota InfoTechnology Center, “Wireless Spectrum Characterization and Dynamic Utilization in Vehicular Communication Networks,” $22,225.
42. The MathWorks, “Collaborative Activities between The MathWorks and WPI Electrical and Computer Engineering,” $434,136.
43. The MathWorks, "Software-Defined Radio Interface Employing S-Functions," $47,149.

Fellowships (National/International)

1. Sean Rocke (PhD Student), Fulbright Fellowship, 2010-2013.
2. Jabari Stegall (PhD Student), Bill and Melinda Gates Scholarship, 2016-Present.
3. Bengi Aygun (PhD Student), Turkish Ministry of Education, 2013-2016.
4. Paulo Victor Ferreira (PhD Student), Brazil Science without Borders, 2013-2018.
5. Renato Iida (PhD Student), Brazil Science without Borders, 2014-Present.
6. Guilherme Meira (MS Student), Brazil Science without Borders, 2014-2016.
7. Cecelia Franzini (MS Student), MITRE Industry Fellowship, 2015.
8. Nathan Ferreira (MS Student), MITRE Industry Fellowship, 2015.
9. Hristos Giannopoulos (MS Student), MITRE Industry Fellowship, 2016.
10. Jonas Rogers (MS Student), MITRE Industry Fellowship, 2017.

11. Adriyel Nieves (PhD Student), WPI Presidential Fellowship, 2020-Present.

Honors, Awards, and Other Recognitions [Research]

1. Recipient, Best Paper Award at 2019 IEEE Global Conference on Signal and Information Processing.
2. Recipient, Best Paper Award (Communications) at 2011 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing.
3. Recipient, WPI ECE Joseph Samuel Satin Distinguished Fellow 2009-2010, $25,000

Teaching

Courses taught at WPI

1. ECE4305 "Software Defined Radio Systems and Analysis" (C-term 2020, Enrollment = 14)
2. ECE3311 “Principles of Communication Systems” (B-term 2019, Enrollment = 24)
3. ECE2305 "Introduction to Communications and Networks" (D-term 2020, Enrollment = 74)
4. ECE2312 “Discrete-Time Signals and Systems” (D-term 2020, Enrollment = 38)
5. ECE4305 "Software Defined Radio Systems and Analysis" (C-term 2019, Enrollment = 12)
6. ECE3311 “Principles of Communication Systems” (B-term 2018, Enrollment = 22)
7. ECE2305 "Introduction to Communications and Networks" (D-term 2018, Enrollment = 71)
8. ECE4305 "Software Defined Radio Systems and Analysis" (C-term 2018, Enrollment = 8)
9. ECE3311 “Principles of Communication Systems” (B-term 2017, Enrollment = 19)
10. ECE2305 "Introduction to Communications and Networks" (D-term 2017, Enrollment = 71)
11. ECE4305 "Software Defined Radio Systems and Analysis" (C-term 2017, Enrollment = 8)
12. ECE2305 "Introduction to Communications and Networks" (D-term 2017, Enrollment = 71)
13. ECE4305 "Software Defined Radio Systems and Analysis" (C-term 2016, Enrollment = 13)
14. ECE5312 "Modern Digital Communications" (Spring 2016, Enrollment = 9)
15. ECE2305 "Introduction to Communications and Networks" (D-term 2016, Enrollment = 92)
16. ECE4305 "Software Defined Radio Systems and Analysis" (C-term 2015, Enrollment = 16)
17. ECE503 "Digital Signal Processing" (Spring 2015, Enrollment = 23)
18. ECE2305 "Introduction to Communications and Networks" (D-term 2015, Enrollment = 85)
19. ECE5312 "Modern Digital Communications" (Spring 2014, Enrollment = 15)
20. ECE4305 "Software-Defined Radio Systems and Analysis" (C-term 2014, Enrollment = 8)
21. ECE4305 "Software-Defined Radio Systems and Analysis" (C-term 2013, Enrollment = 10)
22. ECE503 "Digital Signal Processing" (Spring 2013, Enrollment = 32)
23. ECE4305 "Software-Defined Radio Systems and Analysis" (C-term 2012, Enrollment = 11)
24. ECE502 "Probabilistic Signals and Systems Analysis" (Fall 2012, Enrollment = 34)
25. ECE 596B "Graduate Seminar" (Spring 2012)
26. ECE 5312 "Modern Digital Communications" (Fall 2011, Enrollment = 19)
27. ECE 502 "Analysis of Probabilistic Signals and Systems" (Fall 2011, Enrollment = 82)
28. ECE 596B "Graduate Seminar" (Spring 2011)
29. ECE 4305 "Software-Defined Radio Systems and Analysis" (C-Term 2011, Enrollment = 21)
30. ECE 502 "Analysis of Probabilistic Signals and Systems" (Fall 2010, Enrollment = 56)
31. PQP “Preliminary Qualifying Project - A'10 Boston Project Center” (D-Term 2010, Enrollment = 9)
32. ECE 5312 "Modern Digital Communications" (Spring 2010, Enrollment = 9)
33. ECE 4305 "Software-Defined Radio Systems and Analysis" (D-Term 2010, Enrollment = 9)
34. ECE 502 "Analysis of Probabilistic Signals and Systems" (Fall 2009, Enrollment = 16)

35. ECE 4304 "Digital Communication Systems" (C-Term 2009, Enrollment = 18)
36. ECE 502 "Analysis of Probabilistic Signals and Systems" (Fall 2008, Enrollment = 19)
37. ECE 4304 "Digital Communication Systems" (C-Term 2008, Enrollment = 13)
38. ECE 596B "Graduate Seminar" (Spring 2008)

Interactive Qualifying Projects (IQPs)

1. Caitlin Marie Dragun, Daniel W Lent, Jordyn Leigh Rombola, Leonard Shollo. "Implementing Bike Paths in the City of Worcester." IQP, 2012-2013, Advisor-of-record (w/ co-advisor: Peder Pedersen).
2. Dylan Davitt Murray, Justin Harris, Eliot Fine. "Autonomous Vehicles: Social Acceptance, Ethics & Impact." IQP, 2017-18, Co-Advisor (w/ Advisor: R. Cowlagi).
3. Lindsey Miller, Drew Martin, Robert Capizzio, Frederick Hunter. "Feasibility Study of Dedicated Bicycle Paths in Worcester". IQP 2011-2012, Advisor-of-Record (w/ co-advisor: Peder Pedersen).
4. Robert Over. "The Evolution of New Radio Spectrum Policy." IQP 2012, Co-Advisor (w/ advisor-of-record: David Spanagel).
5. Joshua Price, Daniel Caddell, Marcus Peart. "Educating Middle School Students Through the Implementation of Near Earth Aerial Tracking". IQP 2010, Advisor-of-Record (w/ co-advisor: Susan Vernon-Gerstenfeld), A'10 Boston Project Center.
6. Jeffrey Laun, Tresha Melong, Ellsworth Tyson Kilbourn-Shear. "City of Boston's Green Building Initiative". IQP 2010, Advisor-of-Record (w/ co-advisor: Susan Vernon-Gerstenfeld), A'10 Boston Project Center.
7. Anastasios Vafeiadis, Manish Chawla, Matthew Sommer. "Methodology for Assesing Impact of the Federation of Earth Science Information Partnerships". IQP 2010, Advisor-of-Record (w/ co-advisor: Susan Vernon-Gerstenfeld), A'10 Boston Project Center.
8. Thales Oliviera, Gabriel Louzao, Oliver Rich. "Environmental Issues and Solutions in the Boston Metropolitan Area". IQP 2010, Co-Advisor (w/ advisor-of-record: Susan Vernon-Gerstenfeld), A'10 Boston Project Center.
9. Alexander Alvarez, Sabbir Rashid, Dimitri Loucagos. "A Cost-Benefit Analysis of School Regionalization in Massachusetts". IQP 2010, Co-Advisor (w/ advisor-of-record: Susan Vernon-Gerstenfeld), A'10 Boston Project Center.
10. Pat DeSantis, Sean Levesque, James Montgomery. "Digitar: A technological guitar teaching instrument". IQP 2009-2010, Co-Advisor (w/ advisor-of-record: Frederick Bianchi).

Major Qualifying Projects (MQPs)

1. Lauren Conroy. "Failure Mode and Effects Analysis of Atwater Kent Sustainable and Modular Display System." MQP, 2019, Advisor-of-Record (w/ Co-Advisor: S Virani Bhada).
2. Jon Lee, Quincy Rhodes, Zachary Bergquist, Tim Vermilyea, Olivia Hanson, Chris Brandon. "Implementation of Atwater Kent Sustainable and Modular Display System." MQP, 2019-2020, Advisor-of-Record (w/ Co-Advisor: S Virani Bhada).
3. Cynthia Teng, YaYa Brown, Julien Ataya, Matt Farah. "LTE Frequency Hopping Jammer." MQP (Sponsor: Air Force Research Laboratory), 2019-2020, Advisor-of-Record.
4. Faith Kurtz. "Modeling of Wireless Interference from Lightning Strikes." MQP (Sponsor: MITRE), 2019-2020, Advisor-of-Record (w/ Co-Advisor: Dan Dougherty).
5. Sarah Goklevent. "Comparison Framework for Machine Learning and Algorithmic Automatic Classification." MQP (Sponsor: MITRE), 2019, Advisor-of-Record.
6. Gabriel Entov, Lanhao Mao, Cassandra Pepicelli, Jonathan Tai, Samuel White, Cooper Wolanin. "A Modular System for Autonomizing Off-Road Vehicles." MQP (Sponsor: Mitsubishi Electric Research Laboratory), 2018-2019, Advisor-of-Record (w/ Co-Advisor: H. C. Lauer).

7. Krysta Murdy. "LIDAR Module for Autonomous Vehicles." MQP (Sponsor: HYPACK), 2018-2019, Advisor-of-Record (w/ Co-Advisor: H. C. Lauer).
8. William Schwartz, Lauren Getz, Katherine Smith. "SDR-Based Wireless Spectrum Sensing Network." MQP, 2018-2019, Co-Advisor (w/ Advisor-of-Record: S. Bitar).
9. Hannah Olshansky, Kaan Emir. "Computer-Enabled-Robotic-Base-Enhancing-Remote-Unmanned-Security (C.E.R.B.E.R.U.S) -- Enhanced Location and Telemetry." MQP (Sponsor: Air Force Research Laboratory), 2018-2019, Co-Advisor (w/ Advisor-of-Record: K. Stafford).
10. Thomas Scaplen. "Developing a Data Bus Verification and Testing Device." MQP (The MITRE Corporation), 2018, Advisor-of-Record.
11. Nicholas Schubert, Matej Zampach. “Alternative Navigation Solutions in Global Navigation Satellite System Denied Environments.” MQP (Sponsor: MITRE Project Center), 2017-2018, Advisor-of-Record (w/ Co-Advisor: D. Petkie).
12. Michael Padberg, Dario Martinovic, Michael Milliard, Alima Kargbo, Thomas Fong, Franc Luca, Patrick Trant, Kazim Shaikh, Abdelrahman Sirry. “Autonomous Pedestrian Detection in Transit Buses.” MQP (Sponsor: TransDev), 2017-2018, Advisor-of-Record.
13. Timothy Reuter, Valerie Moore, Tasnim Rahman, Joseph Asante. “In-Vehicle Cyber Security.” MQP, 2017-18, Advisor-of-Record. Jake Merdich. “Bluetooth Localization of Automotive Flow Control.” MQP, 2017-2018, Advisor-of-Record (w/ Co-Advisor: R. Cowlagi).
14. Jeffery Tolbert, Marissa Bennett, Kenneth Quartuccio. “Computer-Enabled-Robotic-Base-Enhancing-Remote-Unmanned-Security (C.E.R.B.E.R.U.S).” MQP (Sponsor: Air Force Research Laboratory), 2017-2018, Co-Advisor (w/ Advisor-of-Record: K. Stafford).
15. Jared Perkins, Camila Di Fino Napolitano, Jade Pierce, Alex Briskman, David Baker, Matthew Mahan. “GOAT CART: A Self-Driving Automotive Platform.” MQP, 2017-2018, Advisor-of-Record.
16. James Beucler, Gage Laskowski, Galahad Wersning. “Electrical CAN Harness for Formula SAE Platform.” MQP, 2017-2018, Advisor-of-Record.
17. Kevin Farr. "Design and Optimization of a Low Profile UHF SATCOM Antenna." MQP (MITRE-Bedford Project Center), 2016, Advisor-of-record.
18. Eric Cheng. "Binary Analysis and Symbolic Execution with angr." MQP (MITRE-Bedford Project Center), 2016, Advisor-of-record.
19. Amanda Gatz. "Analyzing Computer Architecture of Intel Processors for Time Critical Applications." MQP (Raytheon), 2016, Advisor-of-record.
20. Narut Akadejdechapanich, Scott Iwanicki, Jonas Rogers, Kyle Piette, Max Li. "Aerial Software Defined Radio." MQP, 2016, Advisor-of-record.
21. Anna Hernandez, Klaudia Linek. "CAN BUS+ Automotive Networking." MQP, 2016-2017, Advisor-of-record.
22. Michael Inserra, Daniella Morico, Gabriella De Peralta. "RADAR Jamming Prototype." MQP, 2016-2017, Advisor-of-record.
23. Kyle Cederberg, Patrick Long, Rebecca Dall'Orso, Calvin Figuereo-Supraner. "GOAT CART: Automonous Vehicle Prototype System." MQP, 2016-2017, Advisor-of-record.
24. Elizabeth Miller. "Autonomous Vehicle Path Planning." MQP, 2014-2015, Advisor-of-record (w/ co-advisor: Taskin Padir).
25. Prateek Sahay. "Autonomous Vehicle Path Planning." MQP, 2014-2015, Advisor-of-record (w/ co-advisor: Taskin Padir).
26. Garbiel Isko. "Autonomous Vehicle Path Planning." MQP, 2014-2015, Advisor-of-record (w/ co-advisor: Taskin Padir).
27. Conor Geary, Zachariah Lovett, Zachary Jasensky, Christopher Keane. "Aerial Drone Control Networks." MQP, 2014-2015, Advisor-of-record (w/ co-advisor: Taskin Padir).
28. Stefan Gvozdenovic. "RF transceiver + FPGA SDR." MQP, 2014-2015, Advisor-of-record.

29. Robert Hall, Greg Klos. "Long Range Aerial Drones." MQP, 2014-2015, Advisor-of-record.
30. Hristos Giannopoulos. "CAN Stomper: Anti-Hacking Mechanism for Automotive Security." MQP (MITRE-Bedford Project Center), 2015, Advisor-of-record.
31. Scott Bento. "HF Communications Software Defined Radio Implementation." MQP (MITRE Bedford Project Center), 2015, Advisor-of-record.
32. Kaitlin Poss, Chris Schramm, Joshua Grotton, Will Evangelakos. "Power Generating Highway Surfaces." MQP, 2015-2016, Advisor-of-record.
33. Adriana Reyes, Felicia Gabriel, Stella Banou, Syed Hussein. "Hacking Automobiles Via TPMS Signals." MQP, 2015-2016, Advisor-of-record.
34. Santiago Rojas, Mark Bentson, Brian St. Germain, Nick Kalamvokis." MQP, 2015-2016, Advisor-of-record (Co-advisor = Hugh Lauer).
35. Princesa Cloutier, Rigen Mehilli, Alex Helderman. "American Sign Language Translation via Internet of Things." MQP, 2015-2016, Advisor-of-record (Co-advisor = Alex Emanuel).
36. Troy Hughes, Guillermo Vincentelli. "General Framework for Indoor Autonomous Agents." MQP, 2015-2016, Advisor-of-record.
37. Robert Crimmins, Raymond Wang. "Implementation of Vision-Based Autonomous Ground Vehicle." MQP, 2015-2016, Advisor-of-record.
38. Joseph Keogh. "Pre-distortion of Power Distribution Networks." MQP, 2015-2016, Co-advisor (Advisor-of-record = Alex Emanuel).
39. Madeline Burris, Ryan Fawthrop, Edward Murphy, Quinn Perry, Kevin Janesch. "CNAS: Collaboratively Navigating Autonomous Systems." MQP, 2013-2014, Advisor-of-record (w/ co-advisor: Taskin Padir), sponsored by The MathWorks.
40. Phuoc Thanh Luong, Roni George Rostom, Evan Nickolas Ziavras. "Securing Embedded Systems for Unmanned Aerial Vehicles." MQP, 2012-2013, Advisor-of-record (w/ co-advisor: Thomas Eisenbarth).
41. Dale Spencer, Sean Gray, Garbriel McCormick. "Post Developmental Applications of Analog-to-Digital Converters". MQP 2012, Advisor-of-record, sponsored by Analog Devices (Limerick Project Center).
42. Sheila Werth, Jeffrey Wyman. "Wi-Fi Denial of Service Attack on Wired Analog RF Channel Emulator". MQP 2012, Advisor-of-Record (w/ co-advisor: Ted Clancy), sponsored by MIT Lincoln Laboratory (MIT LL Project Center).
43. Allen Blaylock, Benjamin Davidson, Matthew Allen. "Modeling Maritime Radar Scattering". MQP 2012, Co-Advisor (w/ advisor-of-record: Ted Clancy), sponsored by MIT Lincoln Laboratory (MIT LL Project Center).
44. Anastasios Vafeiadis, Archibald Owen. “Resilient Wireless Aerial Networking for Swarms of Unmanned Aerial Vehicles”. MQP 2011-2012, Advisor-of-Record (w/ co-advisor: Taskin Padir), Sponsored by The MathWorks.
45. Andrew Brown, Jonathan Estabrook, Brian Franklin. “Navigation and Sensor Integration for Swarms of Unmanned Aerial Vehicles”. MQP 2011-2012, Advisor-of-Record (w/ co-advisor: Taskin Padir).
46. Catherine Cole, Joseph Funk, James Salvati, Christopher Whipple. “Design of a Modular Unmanned Aerial Vehicle”. MQP 2011-2012, Co-Advisor (w/ advisor-of-record: Taskin Padir).
47. Alison Couture, Farzan Muhammed Tariq, Fatima Mahhou, Brian Goodman. “Wireless Tracking and Identification of Gillaroo Trout in River Environments”. MQP 2011, Advisor-of-Record, A’11 Limerick Project Center, Sponsored by The University of Limerick – Wireless Access Research Group.

48. Mark Hayden, Prabodha Pradhan, Nicholas Bosowski. “Migration of High Precision PulSAR Analog-to-Digital Converter”. MQP 2011, Advisor-of-Record, A’11 Limerick Project Center, Sponsored by Analog Devices BV.
49. Robert Capizzio, Robert Over. "Distributed spectrum sensing for the localization of two-way radio transmitters". MQP 2011, Advisor-of-Record, Sponsored by The MathWorks.
50. Michael Calabro. “A Cooperative Spectrum Sensing Network with Signal Classification Capabilities”. MQP 2009-2010, Advisor-of-Record, Sponsored by The MathWorks.
51. Devin Kelly, Ishrak Khair. “A Channel Model and Geolocation Simulation System”. MQP 2009-2010, Advisor-of-Record, Sponsored by The MathWorks.
52. Bennett Lessard. “Traffic Simulator for the Geo-location Database for Vehicular Cognitive Radio Operation in DTV Spectrum”. MQP 2009-2010, Advisor-of-Record, Sponsored by the Toyota InfoTechnology Center U.S.A.
53. Kshitij Nagpal, Manu Bhalla, James Corell. “SmartTour: A Multi-Dimensional Approach to Campus Navigation”. MQP 2010, Advisor-of-Record, A’10 Limerick Project Center.
54. David Vecchiarelli, Pat DeSantis, Travis Collins. “A Green Approach to a Multi-Protocol Wireless Communications Network ”. MQP 2010, Advisor-of-Record, A’10 Limerick Project Center.
55. Saul Garcia, Ryan Dobbins, Brian Shaw. “Time of Arrival Based Localization using an 802.11 style Communication System”. MQP 2010-2011, Advisor-of-Record, Sponsored by the Naval Research Laboratory.
56. Matthew Murdy, Peter Perreault, Michael Bruno. “Spectrally Agile Wireless Transceiver”. MQP 2008-2009, Advisor-of-Record (Co-Advisor McNeill), NECAMSID Project Center.
57. Alexander Camilo, Francesco Bivona. “Dynamically Reconfigurable Software Defined Radio Architecture”. MQP 2008-2009, Co-Advisor (Advisor-of-Record Xinming Huang).
58. Michael Ghizzoni, Matthew Kelley, Conor Rochford. “Cognitive Radio for Medical Applications.” MQP 2009, Advisor-of-Record (Co-Advisor Vaz), A'09 Limerick Project Center.
59. Manh-Hung Le, Dimitris Saragas, Nathan Webb. “Indoor Navigation System for Handheld Devices.” MQP 2009, Advisor-of-Record (Co-Advisor Vaz), A'09 Limerick Project Center.
60. Brendan Barschdorf, Russell Kernan. “Efficient Wall Plug Adapter”. MQP 2007-2008, Co-Advisor (Advisor-of-Record McNeill), NECAMSID Project Center.
61. Alexander Levy, Shaun Tirrell, Jieyu Wu. “Battery Simulator”. MQP 2008-2009, Advisor-of-Record, (Co-Advisor Vaz), A'08 Limerick Project Center.
62. Olusope Otuyelu, Erik DeVolder, Nikolas Ledoux, Zachery Van Ness. “SmartGlove”. MQP 2008-2009, Advisor-of-Record, (Co-Advisor Vaz), A'08 Limerick Project Center.

Ph.D. Dissertations Advised

1. Le Wang. "Hybrid DES-based Vehicular Network Simulator with Multichannel Operations." ECE699 Dissertation Research (Sponsor: Mathworks), completed April 2019, Advisor-of-Record.
2. Paulo Victor Ferreira. "SRML: Space Radio Machine Learning." ECE699 Dissertation Research (Sponsor: Brazilian Science Without Borders Program), completed May 2017, Advisor-of-Record.
3. Bengi Aygun. "Distributed Adaptation Techniques for Connected Vehicles." ECE699 Dissertation Research, completed August 2016, Advisor-of-Record, sponsored by Turkish Ministry of Education.
4. Travis Collins. "Enabling 5G Technologies." ECE699 Dissertation Research, completed January 2017, Advisor-of-Record, sponsored by The MathWorks & NSF.
5. Steven Olivieri. "Investigating the Security of Near Field Communication." ECE699 Dissertation Research, completed May 2015, Advisor-of-Record.
6. Zhu Fu. "Digital Pre-distortion for Interference Reduction in Dynamic Spectrum Access Networks." ECE699 Dissertation Research, Completed April 2014, Advisor-of-Record.

7. Raquel Machado. "Sparsening Filter Design and Software Defined Radio Applications." ECE699 Dissertation Research, Completed October 2014, Co-Advisor (Advisor-of-Record: A. Klein), sponsored by Analog Devices.
8. Sean Rocke. "On Random Sampling for Compliance Monitoring in Opportunistic Spectrum Access Networks." ECE699 Dissertation Research, Completed May 2013, Advisor-of-Record, sponsored by Fulbright Foundation.
9. Di Pu. "Primary User Emulation Detection in Cognitive Radio Networks." ECE699 Dissertation Research, Completed May 2013, Advisor-of-Record, sponsored by Mathworks.
10. Si Chen. "Vehicular Dynamic Spectrum Access: Using Cognitive Radio for Automobile Networks". ECE699 Dissertation Research, Completed October 2012, Advisor-of-Record, sponsored by Toyota InfoTechnology Center USA.
11. Srikanth Pagadarai. *Wireless Communications and Spectrum Characterization in Impaired Channel Environments*. Ph.D. Dissertation, Worcester Polytechnic Institute (Worcester, MA, USA), Successfully Defended: 3 October 2011.

M.S. Theses Advised

1. Andrew Radlbeck. "Machine Learning Based Action Recognition to Understand Distracted Driving." MS Thesis, December 2019, Advisor-of-Record.
2. Peter Morales. "Games on Graphs: Making Decisions in Social and Biological Networks." MS Thesis (Sponsor: MIT Lincoln Laboratory), December 2019, Advisor-of-Record.
3. Galahad Wernsing. "Programmable Testbed for Bluetooth Experimentation." MS Thesis (Sponsor: octoScope), November 2019, Advisor-of-Record.
4. Tasnim Rahman. "Optimization of Cross-Layer Network Data based on Application Requirements." MS Thesis (Sponsor: AFRL), August 2019, Advisor-of-Record.
5. Kyle McClintick. “Diversity Characterization of Wireless Channels within Challenged Transmission Environments.” ECE599 Thesis Research (Sponsor: MITRE Corporation), December 2018, Advisor-of-Record.
6. Max Li. “Deep Learning for Space Communications and Navigation (SCaN) Testbed.” ECE599 Thesis Research (Sponsor: NASA Glenn Research Center), December 2018, Advisor-of-Record.
7. Jabari Stegall. "Securing Anonymous Data Exchanges in Vehicular Networking Environments." ECE599 Thesis Research (Sponsor: Bill & Melinda Gates Scholarship Program), December 2018, Advisor-of-Record.
8. Jonas Rogers. “GNSS and Inertial Fused Navigation Filter Simulation.” ECE599 Thesis Research (Sponsor: MITRE Corporation), Completed November 2017, Advisor-of-Record.
9. Kuldeep Gill. “Heterogeneous Distributed Spectrum Sensing for Time-Varying Wireless Environments.” ECE599 Thesis Research (Sponsor: National Science Foundation), Completed December 2017, Advisor-of-Record.
10. Nicholas DeMarinis. "Securing Cellular Applications from Malicious Attacks." ECE599 Thesis Research, completed May 2015, Advisor-of-Record.
11. Cecilia Franzini. "Spectrally Agile Waveforms for Ground Penetrating Radar Systems." ECE599 Thesis Research, completed May 2015, Advisor-of-Record, sponsored by MITRE.
12. Nathan Ferreira. "A Framework for Assessing Software Defined Radio System Performance." ECE599 Thesis Research, completed May 2015, Advisor-of-Record, sponsored by MITRE.
13. Hristos Giannopoulos. "Localization of Malicious Electronic Control Units on CANBUS Network using Channel Feature Classification." ECE599 Thesis Research, completed January 2017, Advisor-of- record, sponsored by MITRE.

14. Guilherme Meira. "Attacking the Path Planning of Autonomous Ground Vehicles." ECE599 Thesis Research, Complete May 2016, Advisor-of-Record, sponsored by Engineers without Borders Program (Brazil).
15. Matthew Allen. "Model-Driven Design of FPGA-Based Software-Defined Radio Systems." ECE599 Thesis Research, Completed July 2014, Advisor-of-Record, sponsored by Raytheon.
16. Amit Sail. "Hardware Implementation of Filtering Based Sidelobe Suppression for Spectrally Agile Multicarrier based Cognitive Radio Systems." ECE599 Thesis Research, Completed January 2013, Advisor-of-Record.
17. Harika Velamala. "Filter Bank Multicarrier Modulation for Spectrally Agile Waveform Design." ECE599 Thesis Research, Completed May 2013, Advisor-of-Record.
18. Travis Collins. "Implementation and Analysis of Spectral Subtraction and Signal Separation in Deterministic Wide-Band Anti-Jamming Scenarios." ECE599 Thesis Research, Completed May 2013, Advisor-of-Record.
19. Nathan Olivarez. "Mitigating the Effects of Ionospheric Scintillation on GPS Carrier Recovery." ECE599 Thesis Research, Completed May 2013, Advisor-of-Record.
20. Le Wang. "Detection of Man-in-the-middle Attacks Using Physical Layer Wireless Security Techniques." ECE599 Thesis Research, Completed July 2013, Advisor-of-Record.
21. Devin Kelly. A Practical Distributed Spectrum Sensing System. M.S. Thesis, Worcester Polytechnic Institute (Worcester, MA, USA), April 2011.
22. Steven Olivieri. Modular FPGA-Based Software Defined Radio for CubeSats. M.S. Thesis, Worcester Polytechnic Institute (Worcester, MA, USA), April 2011.
23. Michael J. Leferman. Rapid Prototyping Interface for Software Defined Radio Experimentation. M.S. Thesis, Worcester Polytechnic Institute (Worcester, MA, USA), January 2010.
24. Si Chen. Cross-Layer Optimization and Dynamic Spectrum Access for Distributed Wireless Networks. M.S. Thesis, Worcester Polytechnic Institute (Worcester, MA, USA), October 2009.
25. Di Pu. Frequency Rendezvous and Physical Layer Network Coding for Distributed Wireless Networks. M.S. Thesis, Worcester Polytechnic Institute (Worcester, MA, USA), October 2009.
26. Kevin M. Bobrowski. Practical Implementation Considerations for Spectrally Agile Waveforms in Cognitive Radio. M.S. Thesis, Worcester Polytechnic Institute (Worcester, MA, USA), September 2009.
27. Zhou Yuan. Sidelobe Suppression and Agile Transmission Techniques for Multicarrier-based Cognitive Radio Systems. M.S. Thesis, Worcester Polytechnic Institute (Worcester, MA, USA), May 2009.

Independent Study Projects Advised

1. Colleen Finnegan, "Clocking in Challenged PNT Networks," ECE598, Fall 2019 + Spring 2020, Advisor-of-Record.
2. Justin Seeley, "Low Resolution PNT," ECE598, Fall 2019 + Spring 2020, Advisor-of-Record.
3. William Schwartz, "Quantitative Analysis of PNT Signal Reception," ECE598, Fall 2019 + Spring 2020, Advisor-of-Record.
4. Jonney Lee, "Discrete-Time Signals and Systems," ISP, D-2020.
5. Zachary Schaffer, "Discrete-Time Signals and Systems," ISP, D-2020.
6. Robert Crimmins, "Outdoor Infrared Vision System Using XBox Kinect", ECE598, Summer 2018, Advisor-of-record.
7. Amanda Gatz, "Signal Estimation and Detection", ECE598, Summer 2018, Advisor-of-record.
8. Abhishek Mehta, "Web Application Design", ECE598, Summer 2017, Advisor-of-record.
9. Roger Andrew Santos, "Processor Verification", ECE598, Summer 2017, Advisor-of-record.
10. Cameron Back. "LED Applications." ISP, B-2017, Advisor-of-record.

11. Lauren Getz. "Internet of Things Primer." ISP, A-2017, Advisor-of-record.
12. Kyle Piette. "DARPA Spectrum Collaboration Challenge." ISP, 2016, Advisor-of-record.
13. Kevin Farr. "UHF SATCOM Antenna Analysis." ISP, 2016, Advisor-of-record.
14. Alexander J Ryan. "RF transceiver + FPGA SDR." ISP, 2014-2015, Advisor-of-record.
15. Hristos Giannopoulos. "CANBUS Attack Locator." ISP, 2015, Advisor-of-record.
16. Andrew Brown. “Aerial Localization of Low Power RF Transmitters.” ISP, C-2012, Advisor-of-record.
17. Jonathan Estabrook. “Aerial Localization of Low Power RF Transmitters.” ISP, C-2012, Advisor-of-record.
18. Brian Franklin. “Aerial Localization of Low Power RF Transmitters.” ISP, C-2012, Advisor-of-record.
19. Daniel Alex Sarafconn. “Aerial Localization of Low Power RF Transmitters.” ISP, C-2012, Advisor-of-record.
20. Surabhi Kumar. "Node Design for Wireless Home Security Network." ISP, B-2012, Advisor-of-record.
21. Matthew Allen. "Anti-Jamming Multi-Hop Software-Defined Radio." ISP, C-2012, Advisor-of-record.
22. Nikhil Advani. "Path Planning Algorithm for On-Campus Autonomous Vehicle Operation." ISG, 2016, Advisor-of-record.
23. Kevin Skey. "GPS Signal Estimation and Detection." ISG, 2015, Advisor-of-record.
24. Rushabh Mehta. "Adaptive MAC for Satellite Communications." ECE598, Spring 2014, Advisor-of-record.
25. Bengi Aygun. "Cooperative Communications." ECE598 Directed Research, Spring 2013, Advisor-of-Record.
26. Fei Peng. "Anti-Jamming Multi-Hop Software-Defined Radio." ECE598, Spring 2012, Advisor-of-record.
27. Daniel Cullen. “Devising GNU Radio Laboratory Experiments for an Undergraduate Level SDR Course”. ISP, C-2010.
28. Daniel Cullen. “Devising GNU Radio Laboratory Experiments for an Undergraduate Level SDR Course”. ISP, D-2010.
29. Andrei Ilyashenko. “Application of Neural Networks to Signal Classification”. ISP, A-2010.
30. Pat DeSantis. “Guitar Emulator and Educational Tool”. ISP, C-2011.
31. Sean Levesque. “Guitar Emulator and Educational Tool”. ISP, C-2011.
32. James Montgomery. “Guitar Emulator and Educational Tool”. ISP, C-2011.
33. Pat DeSantis. “Guitar Emulator and Educational Tool”. ISP, D-2011.
34. Sean Levesque. “Guitar Emulator and Educational Tool”. ISP, D-2011.
35. James Montgomery. “Guitar Emulator and Educational Tool”. ISP, D-2011.
36. Alan Lazaros. “Guitar Emulator and Educational Tool”. ISP, D-2011.
37. Anastasios Vafeiadis. “Vehicular Dynamic Spectrum Access Test-Bed via Software-Defined Radio.” ISP, B-2010.
38. Tayyar Rzayev. “Vehicular Dynamic Spectrum Access Test-Bed via Software-Defined Radio.” ISP, B-2010.
39. Devin Kelly. “Developing a Proprietary API for Interfacing to the USRP2 Software-Defined Radio Platform”. ISP, D-2009.
40. Michael Calabro. “Modern Communication Systems Design Using Graphical Software Tools”. ISP, D-2009.
41. Nathan Olivarez. “Implementation of NC-OFDM on USRP2 Software Defined Radio Platform”. ISP D-2011.

42. Andrew Brown. “Aerial Localization of Low Power RF Transmitters.” ISP C-2012.
43. Jonathan Estabrook. “Aerial Localization of Low Power RF Transmitters.” ISP C-2012.
44. Brian Franklin. “Aerial Localization of Low Power RF Transmitters.” ISP C-2012.
45. Daniel Alex Sarafconn. “Aerial Localization of Low Power RF Transmitters.” ISP C-2012.
46. Lin Shen. “Cross-Layer Optimization of Distributed Dynamic Spectrum Access Networks.” ISG, Spring 2011.
47. Ziming Zhang. “Wi Fi Fingerprinting for Indoor Localization.” ISG, Spring 2011.
48. Xinjie Zhuang. “Practical Signal Classification via Higher Order Statistics.” ISG, Spring 2011.
49. Xiaogang Ge. “Optimized Multi-Hop Routing in Dynamic Spectrum Access Networks.” ISG, Spring 2011.
50. Chao Zheng. “Distributed Spectrum Sensing via Heterogeneous Wireless Systems.” ISG, Spring 2011.
51. Jing Yuan. “Higher Order Statistics for Primary User Emulation Attacks.” ISG, Spring 2011.
52. Le Wang. “Resilient Networks for Counteracting Denial-of-Service Cognitive Jamming Attacks.” ISG, Spring 2011.
53. Xiyang Dong. “Spectrally Agile Waveform Design using Multicarrier Modulation.” ISG, Spring 2011.
54. Amber Silva. “Adaptive Beamforming and Null Steering for Optimized Wireless Transmissions with Low Probability of Detection and Interception.” ISG, Fall 2011.
55. Scott Kuzdeba. “Visual Communications Using Image Pattern Transmission.” ISG, Fall 2011.

Honors, Awards, and Other Recognitions [Teaching]

1. Faculty Advisor: YaYa Brown, Julien Ataya, Matt Farah, Cynthia Teng. “LTE Frequency Hopping Jammer.” First Place 2020 Beyond 5G Challenge.
2. Faculty Advisor: Daniel Pelaez, Noah Budris, Noah Parker. “RoadGnar.” First Place in 2020 SICK TiM$10K Challenge.
3. Faculty Advisor: Gabriel Entov, Lanhao Mao, Cassandra Pepicelli, Jonathan Tai, Samuel White, Cooper Wolanin. "A Modular System for Autonomizing Off-Road Vehicles." First Place in 2019 WPI Provost MQP Competition.
4. Faculty Advisor: Gage Laskowski, James Beucler, Galahad Wernsing. "2018 Formula SAE Race Car Electrical System." First Place in 2018 WPI Provost MQP Competition.
5. Faculty Advisor: Son Nguyen, WPI Summer Undergraduate Research Fellowship, Summer 2018.
6. Faculty Advisor, Amanda M. Gatz. “Analyzing Computer Architecture of Intel Processors for Time Critical Applications.” First Place in WPI Provost MQP Competition.
7. Faculty Advisor, Team WPI (Matthew Allen & Fei Peng), Third Place at 2012 Software Defined Radio Challenge, Virginia Tech, Blacksburg, VA, USA, May 2012.
8. Faculty Advisor, Jeffrey Wyman, Sheila Werth. “Wi-Fi Denial of Service Attack on Wired Analog RF Channel Emulator.” Third Place in WPI Provost MQP Competition.
9. Faculty Advisor, Hristos Giannopoulos. "CAN Stomper: Anti-Hacking Mechanism for Automotive Security." second place in WPI Provost MQP Competition.
1. Honorable Mention in 2011 WPI Provost MQP Competition: “A Green Approach to a Multi-Protocol Wireless Communications Network” by David Vecchiarelli, Pat DeSantis, Travis Collins.
2. Third Place in 2010 WPI Provost MQP Competition: "Indoor Navigation System for Handheld Devices" by Nathan Webb, Manh-Hung Le, Dimitris Saragus.
3. Honorable mention in 2009 WPI Provost MQP Competition: “Battery Simulator” by Alexander Levy, Shaun Tirrell, Jieyu Wu (Co-Advisor Vaz).
4. Honorable mention in 2009 WPI Provost MQP Competition: “SmartGlove” by Olusope Otuyelu, Erik DeVolder, Nikolas Ledoux, Zachery Van Ness (Co-Advisor Vaz).

5. Third Place in 2008 WPI Provost MQP Competition: "Efficient Wall Plug Adapter" by Brendan Barschdorf, Russell Kernan (Co-Advisor McNeill).
6. First Place in 2010 MIT Lincoln Laboratory Competition (Massachusetts State Science Fair): "Intelligent Floor Illumination System" by Alyssa Tsiros (Mass Academy).
7. “Best Report” and “Best Presentation” Awards in the 2010 Smart Radio Challenge: "Distributed Spectrum Sensing in Disaster Relief Operations" by Michael Calabro, Ishrak Khair, Devin Kelly (Cash Prize = $3,000USD).
8. First Place in 2009 WPI ECE Graduate Poster Competition (MS Category): "Sidelobe Suppression and Agile Transmission Techniques for Multicarrier-based Cognitive Radio Systems" by Zhou Yuan.
9. First Place in the 2010 Strang Entrepreneurship Competition: "Digitar: A technological guitar teaching instrument" by Pat DeSantis, Sean Levesque, James Montgomery (Advisor-of-Record: Frederick Bianchi).
10. Third Place in the 2010 Daedalus Innovation Competition: "Digitar: A technological guitar teaching instrument" by Pat DeSantis, Sean Levesque, James Montgomery (Advisor-of-Record: Frederick Bianchi).
11. Finalist in 2010 President's IQP Awards Competition (Top 5 out of 44 Submissions): "Digitar: A technological guitar teaching instrument" by Pat DeSantis, Sean Levesque, James Montgomery (Advisor-of-Record: Frederick Bianchi).
12. WPI Summer Undergraduate Research Fellowship (SURF) awarded to Mr. Devin Kelly, Summer 2009.

Service

Administrative Leadership

1. Chair, Committee on Graduate Studies and Research - CGSR (2014-2015).
2. Secretary, Committee on Graduate Studies and Research – CGSR (2012-2013).
3. Secretary, Committee on Tenure and Academic Freedom (2017-2018).
4. Chair, WPI Department of Electrical and Computer Engineering Graduate Program Committee (August 2008-August 2009)
5. Chair, WPI Department of Electrical and Computer Engineering Enrollment Committee (2019-Present).
6. Chair, WPI Department of Electrical and Computer Engineering Subcommittee on the BS/MS program (2007-2015).
7. Organizer, ECE “Smart World Café” at WPI TouchTomorrow (2019)
8. Co-Founder, MITRE/WPI Collaboratory (2016-2019)
9. Director, MITRE-Bedford Project Center (2015-2019).
10. Director, WPI Limerick Project Center (August 2010- 2012)
11. Co-Director, WPI Limerick Project Center (January 2008- August 2010)

University and Departmental Service

1. Member, WPI Department of Electrical and Computer Engineering Graduate Program Committee (2007, 2009-2012).
2. Member, WPI Department of Electrical and Computer Engineering Strategic Planning Committee (2011-2012).

3. Member, WPI Department of Electrical and Computer Engineering Faculty Hiring Committee (2011-2012).
4. Member, WPI Department of Electrical and Computer Engineering – Corporate and Professional Education Committee (2011-2012).
5. Member, WPI Robotics Engineering Program NTT Hiring Committee (2017-2018).
6. Member, WPI Department of Electrical and Computer Engineering TTT Hiring Committee (2018-2019).
7. Member, WPI Department of Electrical and Computer Engineering Faculty Search Committee (2018-2019).
8. Organizer/Presenter, WPI ECE Graduate Studies Informational Session, 17 January 17 2012.
9. ECE596A Host for Prof. Kaushik Chowdhury, Northeastern University, 23 March 2012.
10. ECE596A Host for Dr. Roberto Airoldi, Tampere University of Technology, 23 September 2013.
11. ECE596A Host for Dr. Darel Linebarger, Mathworks, 11 September 2014.
12. ECE596A Host for Prof. KC Kerby-Patel, UMass Boston, 4 December 2014.
13. ECE596B Host for Prof. Koushik Kar, RPI, 13 April 2013.
14. ECE596B Host for Dr. Zoran Zvonar, MediaTek, 21 March 2013.
15. ECE596B Host for Prof. Ruolin Zhou, Western New England University, 28 March 2013.
16. ECE596B Host for Mr. Erich Whitney, MITRE Corporation, 4 April 2013.
17. ECE596B Host for Prof. Mieczyslaw Kokar, Northeastern University, 17 April 2014.
18. ECE596B Host for Dr. Fanny Mlinarsky, OctoScope, 21 March 2014.
19. ECE596B Host for Dr. Thomas Macdonald, MIT Lincoln Laboratory, 3 April 2014.
20. ECE596B Host for Dr. Balasubramanian Ramakrishnan, ViaSat, 10 April 2014.
21. ECE596B Host for Mr. Kevin Skey, MITRE Corporation, 2 May 2016.
22. Member, WPI ECE Provost MQP Competition Committee (2012).
23. Session Chair, WPI ECE MQP Project Presentation Day 2012.
24. Host/Organizer, MathWorks Show-and-Tell @ WPI ECE, 27 April 2012.
25. Faculty Advisor, WPI Women in Electrical and Computer Engineering (2007-2018).
26. Faculty Advisor, IEEE WPI Student Branch (2018-Present)
27. Faculty Advisor, WPI Satellite Development Club (2017-Present)
28. Presenter, WPI ECE Graduate Studies Information Sessions (1/28/2014, 9/24/2014, 10/01/2014)
29. Member, Hiring Committee for WPI OSP Associate Director. (2013)
30. Member, WPI Graduate Admissions Online Interface Project (WPI Graduate Admissions, WPI ECE, WPI CCC).
31. Junior Faculty Mentor, WPI Morgan Center for Teaching and Learning (2012, 2016, 2018,2019)
32. Vice President, WPI Chapter of Sigma Xi (2012-2013)
33. Member, Committee on Graduate Studies and Research – CGSR (2013-2014).
34. Member, Ad Hoc Committee on Teaching Assistant Evaluation (2013-2015).
35. Member, Conflict Management Committee (2014-2015).
36. Member, WPI Strategic Planning Committee - Pillar 3 "Enhancing Research and Strengthening PhD Programs", 2014-2015.
37. Member, Committee on Tenure and Academic Freedom – CTAF (2015-2018).
38. Member, WPI Academic Space Committee (2017-2018).
39. Member, WPI Strategic Planning Committee "Enhancing Research and Strengthening PhD Programs" (2016-2018).
40. Member, WPI Strategic Planning Committee "Competency-Based Online Education" (2017-2018).
41. Facilitator, “Bringing in the Bystander” Freshman Training, August 2014.
42. Volunteer, WPI Presidential Inauguration, November 2014.

43. Organizer, "DIY Satellite Communications", WPI TouchTomorrow 2014.
44. Organizer, "Wireless Scavenger Hunt", WPI TouchTomorrow 2015.
45. Organizer, "WPI's Autonomous Vehicle Platform", WPI TouchTomorrow 2016.
46. Represented WPI at NATO Headquarters in Brussels, Belgium, 30 July 2012.
47. Represented WPI at NIST Foundations for Innovation for Cyber-Physical Systems Workshop (Rosemont, IL, USA), 12-14 March 2012.
48. Represented WPI at the Fox25 Zip Trip in Worcester, MA, USA on 29 June 2012.
49. Represented WPI at 2014 NSF National Transportation Cyber Physical Systems Workshop (Arlington, VA, USA), 23-24 January 2014.
50. Represented WPI at National Science Foundation (NSF), Defense Advanced Research Projects Agency (DARPA), National Institute of Standards and Technology (NIST), and National Telecommunications and Information Administration (NTIA) Advanced Wireless Event (Washington DC), 15 July 2016.
51. Member, WPI Department of Electrical and Computer Engineering Graduate Program Committee (August 2007-May 2008, August 2009 - present)
52. Member, WPI Department of Electrical and Computer Engineering Strategic Planning Committee (2011-2012)
53. Member, WPI Department of Electrical and Computer Engineering Faculty Hiring Committee (2011-2012)
54. Member, WPI Department of Electrical and Computer Engineering – Corporate and Professional Education Committee (2011-2012)
55. Organizer, WPI ECE Distinguished Speaker Graduate Seminar (Fall 2007)
56. Organizer, WPI ECE New Graduate Student Orientation and Cook-Out, September 3, 2008.
57. Presenter, WPI ECE New Graduate Student Orientation, September 3, 2008.
58. Presenter, WPI ECE TA Orientation, September 3, 2008.
59. ECE Departmental Representative, Eta Kappa Nu Induction Night, December 16, 2008.
60. Representative, WPI Merit Scholar Breakfast – “A Closer Look”, April 15, 2009.
61. Presenter, WPI Open House – ECE Information Session, November 11, 2011.
62. Presenter, WPI Open House – ECE Information Session, November 12, 2007.
63. Presenter, WPI ECE “A Closer Look” Information Session, April 7, 2011.
64. Presenter, WPI ECE “A Closer Look” Information Session, April 15, 2009.
65. Presenter, WPI Graduate Student Orientation, August 31, 2009.
66. ECE Representative, WPI Graduate Orientation Session, January 14, 2008
67. ECE Representative, WPI Graduate Orientation Session, August 20, 2009.
68. ECE Representative, WPI Graduate Orientation Session, September 24, 2009.
69. ECE Representative, WPI Graduate Orientation Session, January 14, 2009
70. ECE Representative, WPI Graduate Orientation Session, April 27, 2011.
71. Presenter, WPI ECE Graduate School Information Session, May 7, 2008
72. Presenter, WPI ECE Graduate School Information Session, August 21, 2008
73. Presenter, WPI ECE Graduate School Information Session, September 25, 2008
74. Presenter, WPI ECE Graduate Studies Informational Session, February 10, 2009
75. Presenter, WPI ECE Graduate Studies Informational Session, April 6, 2009
76. Presenter, WPI ECE Graduate Studies Informational Session, September 15, 2009
77. Presenter, WPI ECE Graduate Studies Informational Session, January 26, 2010
78. Presenter, WPI ECE Graduate Studies Informational Session, January 25, 2011
79. Presenter, WPI ECE Graduate Studies Informational Session, March 22, 2011
80. Presenter, WPI ECE Graduate Studies Informational Session, September 26, 2011
81. Presenter, WPI ECE Graduate Studies Informational Session, November 7, 2011

82. Presenter, WPI ECE Graduate Studies Informational Session, January 17, 2012
83. Participant & photographer, WPI ECE Connections event, February 16, 2011
84. Presenter, "Software-Defined Radio Activities at WPI ECE." New England ECE Department Head Association Meeting, 11/05/2011.
85. Presenter, "A Future in Electrical and Computer Engineering" for M.A.S.T.E.R. Program for Local High School Students, January 20, 2010.
86. ECE Host, Russell Smith '47 – Planned Gift, May 22, 2008.
87. Organizer, Mathworks visit to WPI ECE, January 28, 2008.
88. ECE Co-Host (with Wenjing Lou), Visit of Chip Elliott (Program Director, GENI Program Office), April 23, 2008.
89. Panelist, WPI Critical Conversations "Fast Forward: Global Impact of 5G Network", 3 April 2019.

Leadership in Professional Societies

1. President, IEEE Vehicular Technology Society (2018-2019)
2. Board Member, IEEE Technical Activities Board (2018-2019)
3. Chapters Committee Chair, IEEE Vehicular Technology Society (2014)
4. Vice-President Membership, IEEE Vehicular Technology Society (2015)
5. Publicity Committee Chair, IEEE Vehicular Technology Society (2015-2017)
6. Executive Vice-President, IEEE Vehicular Technology Society (2016-2017)
7. Long Range Planning Committee Chair, IEEE Vehicular Technology Society (2016-2017)
8. Board of Governors (Elected Member), IEEE Vehicular Technology Society (2016-2020)
9. Co-Chair, IEEE 5G Community Development Committee (2017-2018)
10. Board Member, IEEE Communications Society – Technical Committee on Cognitive Radio Networks – Standing Committee
11. Co-Chair, IEEE Future Networks Initiative Community Development Committee (2019-Present)

Memberships and Offices Held in Professional Societies

1. Member, IEEE Communications Society - Technical Committee on Cognitive Radio Networks/Standing Committee
2. Senior Member, Institute of Electrical and Electronics Engineers (IEEE)
3. Senior Member, IEEE Vehicular Technology Society
4. Senior Member, IEEE Communications Society
5. Senior Member, IEEE Intelligent Transportation Systems Society
6. Senior Member, IEEE Women in Engineering
7. Member, Sigma Xi - The Research Honor Society
8. Member - Eta Kappa Nu -The Electrical and Computer Engineering Honor Society
9. Member, American Society for Engineering Education (ASEE)
10. Webmaster, IEEE Vehicular Technology Society (2016-2017)
11. Member, IEEE Technical Activities Board -- Ad Hoc Committee on Legal Review Process (2018)
12. Member, IEEE Technical Activities Board -- Division IX Nominations Committee (2018-2019)
1. Member, Institute of Electrical and Electronics Engineers (IEEE), Senior Member
2. Member, IEEE Communications Society
3. Member, IEEE Signal Processing Society
4. Member, IEEE Vehicular Technology Society
5. Member, IEEE Communications Society Technical Committee on Personal Communications
6. Member, IEEE Communications Society Technical Subcommittee on Cognitive Networks
7. Member, IEEE Communications Society Radio Communications Committee
8. Member, IEEE Communications Society Ad Hoc & Sensor Networks Technical Subcommittee

9. Member, IEEE Women in Engineering
10. Member, Sigma Xi, The Research Honor Society
11. Member, Eta Kappa Nu, The Electrical and Computer Engineering Honor Society
12. Member, American Society for Engineering Education (ASEE)

Editorial Activities

1. Technical Editor, IEEE Communications Magazine (2011-present)
2. Editor, IEEE Transactions on Wireless Communications (2013-2016)
3. Editor, IEEE Transactions on Communications (2014-2015)
4. Associate Technical Editor, IEEE Communications Magazine (2007-2010)
5. Editorial Board Member, IEEE Communications Surveys and Tutorials (2005-2010)
6. Lead Editor. IEEE Educational Activities/Vehicular Technology Society Online Lecture Series on Autonomous Vehicles, 2019.
7. Guest Co-Editor. "Special Issue: Innovative Spectrum Sharing Techniques for D2D communications." IEEE Access, 2020.
8. Guest Co-Editor, IEEE Vehicular Technology Magazine – Special Issue on Vehicular Security and Privacy, 2018.
9. Guest Editor, IEEE Communications Magazine, Feature Topic on Cognitive Radio Communications and Networks (April 2008)
10. Guest Editor, IEEE Communications Magazine, Feature Topic on Cognitive Radios for Dynamic Spectrum Access (May 2007)
11. Guest Editor, ACM/Springer Mobile Networks and Applications (MONET), Special Issue on Cognitive Radio Oriented Wireless Networks and Communications (July 2007-March 2008)
12. Guest Co-Editor, IEICE Transactions on Communications - Special Section on "Technologies for Effective Utilization of Spectrum Whitespace".

Referee Activities

1. Technical Program Committee Member, 2014 IEEE Global Communications Conference - Wireless Communications Symposium, Austin, TX, USA (November 2014).
2. Technical Program Committee Member, 2014 IEEE Global Communications Conference - Signal Processing in Communications Symposium, Austin, TX, USA (November 2014).
3. Technical Program Committee Member, First ACM Workshop on Cognitive Radio Architectures for Broadband, Miami, FL, USA (October 2013).
4. Technical Program Committee Member, 2nd International Conference on Connected Vehicles & Expo - ICCVE 2013, Las Vegas, NV, USA (December 2013).
5. Technical Program Committee Member, 2013 IEEE Global Conference on Signal and Information Processing - Software Defined and Cognitive Radios Symposium, Austin, TX, USA (December 2013).
6. Technical Program Committee Member, 2014 IEEE Global Communications Conference – Wireless Communications Symposium, Austin, TX, USA (November 2014).
7. Technical Program Committee Member, 2014 IEEE Global Communications Conference – Signal Processing in Communications Symposium, Austin, TX, USA (November 2014).
8. Technical Program Committee Member, Second International Workshop on Emerging Cognitive Radio Applications and Algorithms, Madrid, Spain (June 2013).
9. Technical Program Committee Member, 2012 IEEE Vehicular Networking Conference, Seoul, Korea (October 2012).
10. Technical Program Committee Member, 19th European Wireless Conference, Guildford, United Kingdom (April 2013).

11. Technical Program Committee Member, 2013 IEEE Global Communications Conference – Wireless Communications Symposium, Atlanta, GA, USA (November 2013).
12. Technical Program Committee Member, 2013 IEEE International Conference on Communications – Wireless Communications Symposium, Budapest, Hungary (June 2013).
13. Technical Program Committee Member, 2012 IEEE International Conference on Communications – Wireless Communications Symposium, Ottawa, ON, Canada (June 2012).
14. Technical Program Committee Member, 2012 IEEE Intelligent Vehicles Symposium, Alcalá de Henares, Spain (June 2012).
15. Technical Program Committee Member, 2012 IEEE 75th Vehicular Technology Conference – Telematics Track, Yokohama, Japan (May 2012).
16. Technical Program Committee Member, 18th European Wireless Conference, Poznan, Poland (May 2012).
17. Technical Program Committee Member, 2012 International Conference on Computing, Networking and Communications - Cognitive Computing and Networking Symposium, Munich, Germany (January 2012).
18. Technical Program Committee Member, 2012 IEEE Global Communications Conference – Cognitive Radio Networks Symposium, Anaheim, CA, USA (November 2012)
19. Technical Program Committee Member, 2012 IEEE Global Communications Conference – Wireless Communications Symposium, Anaheim, CA, USA (November 2012)
20. Technical Program Committee Member, First International Workshop on Emerging Cognitive Radio Applications and Algorithms, San Francisco, CA, USA (June 2012)
21. NSF Panels (2012-2017)
22. Technical Program Committee Member, 2012 IEEE International Conference on Communications – Wireless Communications Symposium, Ottawa, ON, Canada (June 2012).
23. Technical Program Committee Member, 2012 IEEE Intelligent Vehicles Symposium, Alcalá de Henares, Spain (June 2012).
24. Technical Program Committee Member, 2012 IEEE 75th Vehicular Technology Conference – Telematics Track, Yokohama, Japan (May 2012).
25. Technical Program Committee Member, 18th European Wireless Conference, Poznan, Poland (May 2012).
26. Technical Program Committee Member, 2012 International Conference on Computing, Networking and Communications - Cognitive Computing and Networking Symposium, Munich, Germany (January 2012).
27. Technical Program Committee Member, 2011 IEEE Vehicular Networking Conference, Amsterdam, Netherlands (November 2011)
28. Technical Program Committee Member, 2011 IEEE International Conference on Communications – Wireless Communications Symposium, Kyoto, Japan (June 2011)
29. Technical Program Committee Member, 2011 IEEE International Conference on Communications – Cognitive Radio Networks Symposium, Kyoto, Japan (June 2011)
30. Technical Program Committee Member, 2011 IEEE Intelligent Vehicles Symposium, Baden Baden, Germany (June 2011)
31. Technical Program Committee Member, 2011 IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN), Aachen, Germany (May 2011)
32. Technical Program Committee Member, 2010 ICST BIONETICS, Boston, MA, USA (December 2010)
33. Technical Program Committee Member, 2010 IEEE Vehicular Networking Conference, Jersey City, NJ, USA (December 2010)

34. Technical Program Committee Member, 2010 IEEE Global Telecommunications Conference – Selected Areas in Communications Symposium, Miami, FL, USA (November 2010)
35. Technical Program Committee Member, 2010 IEEE Global Telecommunications Conference – Wireless Communications Symposium, Miami, FL, USA (November 2010)
36. Technical Program Committee Member, Seventh International Symposium on Wireless Communication Systems, York, UK (September 2010)
37. Technical Program Committee Member, 2010 IEEE Vehicular Technology Conference – Fall (VTC-Fall), Ottawa, Canada (September 2010)
38. Technical Program Committee Member, 2010 IEEE International Conference on Communications – Wireless Communications Symposium, Cape Town, South Africa (June 2010)
39. Technical Program Committee Member, 2010 IEEE International Conference on Communications – Wireless Networking Symposium, Cape Town, South Africa (June 2010)
40. Technical Program Committee Member, 2010 IEEE Vehicular Technology Conference – Spring (VTC-Spring), Taipei, Taiwan (April 2010)
41. Technical Program Committee Member, 2010 IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN), Singapore (April 2010)
42. Technical Program Committee Member, 2009 IEEE Global Telecommunications Conference – Wireless Communications Symposium, Honolulu, HI, USA (November 2009)
43. Technical Program Committee Member, 2009 IEEE Global Telecommunications Conference – Wireless Networking Symposium, Honolulu, HI, USA (November 2009)
44. Technical Program Committee Member, 2009 IEEE Global Telecommunications Conference – Cognitive Radio and Networks Symposium, Honolulu, HI, USA (November 2009)
45. Technical Program Committee Member, 2009 International Conference on Wireless Algorithms, Systems, and Applications, Boston, MA, USA (August 2009).
46. Technical Program Committee Member, 4th International Conference on Cognitive Radio Oriented Wireless Networks and Communications (CROWNCOM), Hannover, Germany (June 2009).
47. Technical Program Committee Member, 2009 IEEE International Conference on Communications – Workshop in Cognitive Radio Networking, Dresden, Germany (June 2009)
48. Technical Program Committee Member, 2009 IEEE International Conference on Communications – Wireless Communications Symposium, Dresden, Germany (June 2009)
49. Technical Program Committee Member, 2009 IEEE International Conference on Communications – Wireless Networking Symposium, Dresden, Germany (June 2009)
50. Technical Program Committee Member, European Wireless Conference 2009, Aalborg, Denmark (May 2009)
51. Technical Program Committee Member, 2008 IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN), Chicago, IL, USA (October 2008)
52. Technical Program Committee Member, 17th International Conference on Computer, Communications, and Networks -- Cognitive Radio Networks Track, St. Thomas, US Virgin Islands (August 2008)
53. Technical Program Committee Member, European Wireless Conference 2008, Prague, Czech Republic (June 2008)
54. Technical Program Committee Member, 5th Annual IEEE Communications Society Conference on Sensor , Mesh and Ad Hoc Communications and Networks -- Software Defined Radio Workshop, San Francisco, CA, USA (June 2008)
55. Technical Program Committee Member, 2008 IEEE International Conference on Communications – Wireless Communications Symposium, Beijing, China (June 2008)

56. Technical Program Committee Member, 2008 IEEE International Conference on Communications – Communication Theory Symposium, Beijing, China (June 2008)
57. Technical Program Committee Member, 2008 IEEE International Conference on Communications – "Towards Cognition in Wireless Networks" Workshop, Beijing, China (June 2008)
58. Technical Program Committee Member, 67th IEEE Vehicular Technology Conference – Transceiver Technologies Track, Singapore (May 2008)
59. Technical Program Committee Member, 3rd International Conference on Cognitive Radio Oriented Wireless Networks and Communications, Singapore (May 2008)
60. Technical Program Committee Member, 2008 IEEE Wireless Communications and Networking Conference, Las Vegas, NV, USA (March 2008)
61. Technical Program Committee Member, 2008 IEEE Consumer Communications and Networking Conference – Workshop on Cognitive Radio Networks, Las Vegas, NV, USA (January 2008)
62. Technical Program Committee Member, 2007 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing, Victoria, BC, Canada (September 2007)
63. Technical Program Committee Member, 2007 IEEE Global Telecommunications Conference – Wireless Communications Symposium, Washington DC, USA (November 2007)
64. Technical Program Committee Member, Fourth International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (Qshine 2007) – First International Workshop on Cognitive Wireless Networks (CWNets), Vancouver, BC, Canada (August 2007)
65. Technical Program Committee Member, 2007 IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN), Dublin, Ireland (April 2007)
66. Technical Program Committee Member, 2007 IEEE International Conference on Communications – Wireless Communications Symposium, Glasgow, Scotland, UK (June 2007)
67. Technical Program Committee Member, 2007 IEEE International Conference on Communications – "Towards Cognition in Wireless Networks" Workshop, Glasgow, Scotland, UK (June 2007)
68. Technical Program Committee Member, 2007 IEEE Wireless Communications and Networking Conference, Hong Kong, China (March 2007)
69. Technical Program Committee Member, 2007 IEEE Consumer Communications and Networking Conference – Workshop on Cognitive Radio Networks, Las Vegas, NV, USA (January 2007)
70. Technical Program Committee Member, 2006 IEEE Global Telecommunications Conference, San Francisco, CA, USA (November 2006)
71. Reviewer for the following journals:
    a. Proceedings of the IEEE
    b. IEEE Journal on Selected Areas in Communications
    c. IEEE Transactions on Communications
    d. IEEE Transactions on Signal Processing
    e. IEEE Transactions on Wireless Communications
    f. IEEE Transactions on Vehicular Technology
    g. IEEE Transactions on Image Processing
    h. IEEE Transactions on Antennas and Propagation
    i. IEE Proceedings on Communications
    j. IEE Electronic Letters
    k. IEEE Communication Letters
    l. IEEE Communications Magazine
    m. EURASIP Journal on Applied Signal Processing
    n. IEEE Vehicular Technology Magazine

o. IEEE Journal on Selected Topics on Signal Processing
p. ETRI Journal
q. IET Communications

72. Reviewer for the following conferences:
    a. IEEE International Conference on Communications 2009
    b. IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks 2008
    c. International Conference on Computer, Communications, and Networks 2008
    d. International Conference on Cognitive Radio Oriented Wireless Networks and Communications 2008
    e. European Wireless 2008
    f. IEEE International Conference on Communications 2008
    g. IEEE Vehicular Technology Conference 2008 (Spring)
    h. IEEE Wireless Communications and Networking Conference 2008
    i. 2007 International Symposium on Wireless Communication Systems
    j. IEEE Symposium on Signal Processing and Information Technology 2006
    k. IEEE Military Communications Conference 2006
    l. IEEE Global Telecommunications Conference 2006
    m. 23rd Queen's Biennial Symposium on Communications
    n. IEEE Vehicular Technology Conference 2006 (Fall)
    o. International Conference on Communications, Circuits and Systems 2006
    p. IEEE Vehicular Technology Conference 2006 (Spring)
    q. IEEE Wireless Communications and Networking Conference 2006
    r. IEEE International Conference on Communications 2006
    s. IEEE Vehicular Technology Conference 2005 (Fall)
    t. IEEE International Conference on Communications 2005
    u. IEEE International Conference on Wireless Networks, Communications, and Mobile Computing 2005 (WirelessCom 2005)
    v. IEEE Wireless Communications and Networks Conference 2004
    w. IEEE Vehicular Technology Conference 2004 (Fall)
    x. IEEE Vehicular Technology Conference 2002 (Fall)
73. Reviewer/panelist for the following government funding agencies:
    a. Le Fonds de Recherche sur la Nature et les Technologies du Quebec
    b. Natural Sciences and Engineering Research Council of Canada
    c. National Science Foundation

Conference Organization and Leadership

1. Co-Founder, Boston Software-Defined Radio User Group (SDR-Boston), July 2011 - Present.
2. General Co-Chair, 82nd IEEE Vehicular Technology Conference, Boston, MA, USA (September 2015).
3. General Co-Chair, 2013 IEEE Vehicular Networking Conference, Boston, MA, USA (October 2013).
4. Symposium Co-Chair, 2015 IEEE International Conference on Communications – Cognitive Radio Networks Symposium, London, England (June 2015).
5. Symposium Co-Chair, 2014 IEEE Global Conference on Signal and Information Processing - Signal Processing Challenges and Architectures for High Throughput Satellite Communications (Atlanta, GA, USA), December 2014.
6. Symposium Co-Chair, 2011 IEEE Global Telecommunications Conference – Cognitive Radio Networks Symposium, Houston, TX, USA (November 2011)

7. Technical Program Co-Chair, 78th IEEE Vehicular Technology Conference, Las Vegas, NV, USA (September 2013)
8. Technical Program Committee Co-Chair, 2nd International Conference on Cognitive Radio Oriented Wireless Networks and Communications, Orlando, FL, USA (August 2007)
9. Track Chair, 76th IEEE Vehicular Technology Conference – Fall (Quebec City, QC, Canada), September 2012.
10. Track Chair, 7th International ICST Conference on Cognitive Radio Oriented Wireless Networks and Communications (Stockholm, Sweden), June 2012.
11. Track Chair, 76th IEEE Vehicular Technology Conference – Fall (Quebec City, QC, Canada), September 2012.
12. Track Chair, 7th International ICST Conference on Cognitive Radio Oriented Wireless Networks and Communications (Stockholm, Sweden), June 2012.
13. Track Chair, 2009 IEEE Military Communications Conference, Boston, MA, USA (October 2009)
14. Track Chair, 2008 IEEE Military Communications Conference, San Diego, CA, USA (Nov. 2008)
15. Track Chair, 66th IEEE Vehicular Technology Conference, Baltimore, MD, USA (September 2007)
16. Track Chair, 64th IEEE Vehicular Technology Conference, Montreal, QC, Canada (Sept. 2006)
17. Workshop Co-Chair, First IEEE Workshop on Spectrum Access in Autonomous Vehicle Ecosystem (SAVE 2020), Antwerp, Belgium (25 May 2020)
18. Workshop Co-Chair, Second International Workshop on Cognitive Radio and Electromagnetic Spectrum Security (Philadelphia, PA, USA), October 2016.
19. Workshop Co-Chair, First International Workshop on Cognitive Radio and Electromagnetic Spectrum Security (San Francisco, CA, USA), October 2014.
20. Workshop Co-Chair, Second IEEE Workshop on Vehicular Security (V-SEC 2017), Toronto, Canada
21. Workshop Co-Chair, First IEEE Workshop on Vehicular Security (V-SEC 2016), Montreal, Canada (September 2016)
22. Workshop Co-Chair, Tenth New England Workshop on Software-Defined Radio (Worcester, MA, USA), 12 August 2020. [ONLINE]: http://sdr-boston.org/
23. Workshop Co-Chair, Ninth New England Workshop on Software-Defined Radio (Worcester, MA, USA), 14 June 2019. [ONLINE]: http://sdr-boston.org/
24. Workshop Co-Chair, Eighth New England Workshop on Software-Defined Radio (Medford, MA, USA), 4 May 2018. [ONLINE]: http://sdr-boston.org/
25. Workshop Co-Chair, Seventh New England Workshop on Software-Defined Radio (Medford, MA, USA), 2 June 2017. [ONLINE]: http://sdr-boston.org/
26. Workshop Co-Chair, Sixth New England Workshop on Software-Defined Radio (Boston, MA, USA), 22 May 2016. [ONLINE]: http://sdr-boston.org/
27. Workshop Co-Chair, Fifth New England Workshop on Software-Defined Radio (Worcester, MA, USA), 22 May 2015. [ONLINE]: http://sdr-boston.org/
28. Workshop Co-Chair, Fourth New England Workshop on Software-Defined Radio – NEWSDR'14 (Boston, MA, USA), 6 June 2014. [ONLINE]: http://sdr-boston.org/
29. Workshop Co-Chair, Third New England Workshop on Software-Defined Radio – NEWSDR'13 (Worcester, MA, USA), 17 May 2013. [ONLINE]: http://sdr-boston.org/
30. Workshop Co-Chair, Second New England Workshop on Software-Defined Radio – NEWSDR'12 (Boston, MA, USA), 14 May 2012. [ONLINE]: http://sdr-boston.org/
31. Workshop Co-Chair, First New England Workshop on Software-Defined Radio – NEWSDR'11 (Boston, MA, USA), 1 October 2011. [ONLINE]: http://sdr-boston.org/
32. Workshop Co-Chair, Seventh International Symposium on Wireless Communication Systems (ISWCS 2010) – Cognitive Communications Workshop, York, UK (September 2010)

33. Co-Organizer, IEEE Connected and Automated Vehicle Summit, Santa Clara, CA, USA (8 February 2018)
34. Workshop Co-Chair, First IEEE Workshop on Situational Awareness for Emerging Network Enabled Transportation Systems (SAFENETS), Lowell, MA, USA, 1 October 2019.
35. Co-Organizer, IEEE Vehicular Technology Society Connected & Autonomous Vehicle Summer School @ WPI (20-21 August 2018)
36. Co-Organizer, IEEE Vehicular Technology Society Connected & Autonomous Vehicle Summer School @ WPI (18-19 May 2017)
37. Co-Organizer, IEEE Vehicular Technology Society Connected & Autonomous Vehicle Summer School @ WPI (28-29 July 2016).
38. Workshop Co-Chair, Second IEEE Workshop on Cognitive Radio Architectures for Broadband (Raleigh, NC, USA), October 2014.
39. Program Co-Chair, International Conference on Broadband and Wireless Computing, Communication and Applications (Victoria, BC, Canada), 12-14 November 2012.
40. Tutorial Co-Chair, 2011 IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN), Aachen, Germany (May 2011)
41. Tutorial Co-Chair, 2008 IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN), Chicago, IL, USA (October 2008)
42. Student Travel Grant Chair, 2010 IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN), Singapore (April 2010)
43. Program Co-Chair, International Conference on Broadband and Wireless Computing, Communication and Applications (Victoria, BC, Canada), 12-14 November 2012.
44. Co-Organizer (w/ Pieter Mosterman & Justyna Zander), First New England Workshop on Cyber Physical Systems, Natick, MA, USA, 29 May 2012.
45. Session Chair. “IEEE 86th Vehicular Technology Conference.” (Toronto, Canada) 28 September 2017.
46. Sesssion Chair, 2012 IEEE International Conference on Communications – Wireless Communications Symposium, Ottawa, ON, Canada (June 2012)
47. Sesssion Chair, 76th IEEE Vehicular Technology Conference – Fall (Quebec City, QC, Canada), September 2012.
48. Panelist, "Cognitive Communications for Disaster Response" (w/ Alhussein Abouzeid, Taieb Znati, Sujal Das) at the 21st International Conference on Computer Communication Networks, Munich, Germany (August 2012)..
49. Session Chair, 2011 IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing (Victoria, BC, USA), 25 August 2011.
50. Session Chair, 2011 IEEE Vehicular Networking Conference, Jersey City, NJ, USA (December 2010)
51. Session Chair, 4th International Conference on Cognitive Radio Oriented Wireless Networks and Communications, Hannover, Germany (June 2009)
52. Session Chair, 2008 IEEE Military Communications Conference, San Diego, CA, USA (Nov. 2008)
53. Session Chair, 2008 IEEE Wireless Communications and Networking Conference (WCNC), Las Vegas, NV, USA (April 2008)
54. Session Co-Organizer/Co-Chair, 2007 IEEE Global Telecommunications Conference – Special Session on Cognitive Radios, Washington DC, USA (November 2007)
55. Session Chair, 66th IEEE Vehicular Technology Conference, Baltimore, MD, USA (Sept. 2007)
56. Session Chair, 2nd International Conference on Cognitive Radio Oriented Wireless Networks and Communications, Orlando, FL, USA (August 2007)
57. Session Chair, 64th IEEE Vehicular Technology Conference, Montreal, QC, Canada (Sept. 2006)

58. Session Chair, 62nd IEEE Vehicular Technology Conference, Dallas, TX, USA (September 2005)
59. Session Chair, 60th IEEE Vehicular Technology Conference, Los Angeles, CA, USA (Sept. 2004)
60. Session Chair, Motorola Scientific Advisory Board Associates Annual Meeting, Montreal, QC, Canada (April 2004)
61. Chief Judge, Student Poster Competition - Agile All-Photonic Networks (AAPN) Annual Research Review, Ottawa, ON, USA (June 2006)
62. Judge, GRAD 2009 Graduate Student Poster Competition, Worcester, MA, USA (April 2009)
63. Judge, GRAD 2008 Graduate Student Poster Competition, Worcester, MA, USA (March 2008)
64. Visiting Scholar Sponsor to WPI, Ms. Mai Ohta (University of Electro-communications, Tokyo, Japan), 6 July 2011 – 4 August 2011.

Honors, Awards, and Other Recognitions [Service]

1. 2018 IEEE Community Service Award (Faculty), IEEE WPI Branch
2. 2013 IEEE Community Service Award (Faculty), IEEE WPI Branch
3. 2010 IEEE Community Service Award (Faculty), IEEE WPI Branch

---

Media Coverage

1. Digital Trends: “New ‘cognitive radio’ system could be a game-changer for communication in space” Posted 24 July 2020.
2. Intelligent Mobility Xperience: “Before autonomous vehicles go mainstream, connected cars require security vigilance” Posted 10 June 2020
3. Worcester Telegram & Gazette: “As local college campuses shut down from coronavirus, classes move online” Posted 21 March 2020
4. Hartford Courant: “Opinion | Coronavirus shows how important 5G networking is” Posted 11 April 2020
5. Connected World Magazine: “The 5G/AV Connection” Posted April 2019
6. eMarketer: “Smart Homes 2020 – The End of Interruptive Marketing as We Know It (Part 1 of a 2-Part IoT Series)”
7. IEEE Transmitter: “Self-Driving School Buses are Stress Relief for Some Parents” Posted April 2019
8. IoT Agenda: “How is dynamic spectrum access used by connected cars?” Posted 20 May 2019
9. MetroWest Daily News: “Electric vehicle rebate program will end in September” Posted 25 June 2019
10. Worcester Business Journal: “Our mark on the moon” Posted 18 July 2019
11. WPI Media Release: “Wyglinski Keeping First Responders’ Comms Safe” Posted 9 August 2019
12. Quartz: “Quartz Future of Finance: Why “energy harvesting” is catching on” Posted 21 June 2019
13. Assembly Magazine: “Team Effort at WPI Tackles Self-Driving Car Challenge” Posted 12 September 2018
14. Aviation Week & Space Technology: “Algorithm Seeks To Advance Space Communications” Posted 18 October 2018
15. Charter TV3 — Worcester News Tonight: “WPI Autonomous Cars” Posted 5 November 2018
16. Worcester Telegram and Gazette: “Worcester on the Road to Driverless Vehicles” Posted 4 November 2018

17. IEEE Institute: “Machine Learning Could Boost Space Communications” Posted 11 December 2018
18. Money: “Experts Suggest the Future of Autonomous Vehicle Movement Rests on Resolving Business Challenges and New Technology” Posted 12 November 2018
19. Science News: “This self-driving car could one day take you on a real road trip” Posted 7 May 2018
20. Seeking Delphi: “Podcast #26: Future Driving Part 1, Interconnectivity and Self-Driving Cars with Alex Wyglinski” Posted 15 November 2018
21. WBUR Interview on NASA SCaN Testbed Research, October 2018.
22. WBZ Interview on NASA SCaN Testbed Research, October 2018.
23. WPI Daily Herd: “Uniting Diverse Research Areas to Drive Autonomous Cars” Posted 14 February 2018
24. WPI Press Release: “WPI Researchers Use International Space Station as Testbed for Communications Experiments with NASA” Posted 3 October 2018
25. Futurism. “Will Wireless Connections Between Autonomous Vehicles Make Them Safer?” Posted 22 August 2017
26. ECN. “Brainstorm: How To Best Handle The Connected Car’s Network Strain.” Posted 7 August 2017
27. USA Today. “uBeam’s Meredith Perry shows her stealth wireless charging technology really works.” Posted 1 June 2017
28. Pittsburgh Post-Gazette. “Pittsburgh at center of race to create components for self-driving cars.” Posted 29 May 2017
29. Forbes. “Something Your Autonomous Car Might Say: Can You Drive Me Now?” Posted 10 February 2017
30. IEEE 5G Podcast. “What Challenges Do You Foresee that Could Affect Deployment of 5G.” Posted 1 February 2017
31. Christian Science Monitor. “Google launches self-driving minivans: are autonomous cars inching closer to mass movement?” Posted 9 January 2017
32. TechRepublic. “The future of the auto industry ‘depends on partners,’ says Nissan CEO.” Posted 10 January 2017
33. Microwave Journal. “Worcester Polytechnic Institute Professor Receives ORB Analytics Award.” Posted 19 December 2016
34. Microwave Journal. “Fabs & Labs – Wireless Innovation Lab Tackles Problems, Forges Partnerships – Even Bumblebees.” Posted 30 November 2016
35. Executive Biz. “Mitre, Worcester Polytechnic Institute Open Joint In-Campus Collaboration Space; Alex Wyglinski Comments.” Posted 18 November 2016
36. WPI Daily Herd. “MITRE, WPI Launch Collaborative Space on Campus.” Posted 16 November 2016
37. Commonweath Magazine. “Situational awareness key to safe, self-driving cars.” Posted 30 October 2016
38. Forbes. “How Autonomous Vehicles Will Navigate Bad Weather Remains Foggy.” Posted 29 November 2016
39. Worcester Telegram & Gazette. “Bumblebees may teach smart cars a thing or two.” Posted 11 September 2016

40. WPI Daily Herd. “In the Driver’s Seat.” Posted 23 February 2016
41. IEEE Spectrum. “Cars Could Follow the Flight of the Bumblebee.” Posted 3 December 2015
42. Industry Week. “Is Toyota Breaking Ground, or Playing Catch-Up?.” Posted 11 November 2015
43. MotherBoard. “Bumblebees Are Teaching Smart Cars How To Drive.” Posted 15 November 2015
44. WPI Daily Herd. “The Bee-Team: Bee-Lieving in Cognitive Solutions.” Posted 21 December 2014
45. Wired. “How the Air Force can Finally Give you a Decent WiFi Connection.” Posted 2 May 2014
46. EEWeb. “Interview with Alex Wyglinski.” Posted 20 April 2011
47. Government Technology Magazine. “LightSquared and the GPS Industry Struggle to Coexist.” Posted 28 September 2011
48. Test & Measurement World. “The Wireless Spectrum Isn’t Full.” Posted 1 November 2010