

Adirondack Area Network

Network Engineer

Castleton, NY

09/1999–06/2004

Responsible for switch and router configuration on Cisco-based frame-relay network with approximately 200 circuits. Developed automated network measurement and management applications. Responsible for A/V, teleconference, telemedicine, and distance-learning room design, equipment specification, and acquisition. Performed on-site network and equipment installations.

TECHNICAL SKILLS

Systems:

- Architecting large-scale distributed cloud-based systems
- IPv6 deployment & security
- Designing Internet-scale network measurement & data-collection infrastructure
- Creating high-throughput REST/JSON APIs

Programming Languages:

Proficient

Go, Python, C/C++, HTML, PHP, SQL, Redis, Javascript, MATLAB, Perl, Bash

Familiar

Java, CGI (Perl), OpenGL, Tcl/Tk, AppleScript, make

Version Control:

Git, SVN, Mercurial, CVS

Information/Internet Technology:

- AWS: S3, EC2, VPC, ELB, CloudFront, Lambda, Route53, API Gateway, SQS, SNS, SES, ECS, RDS, DynamoDB, Cognito, Kinesis, Batch, StepFunctions, CodeCommit, CodePipeline, CloudWatch
- Networking (DNS, BGP, OSPF, IPv6, IPv4, UDP, TCP, ARP, DHCP, SNMP, Dynamic routing, experimental protocols, firewalls)
- Services (Apache, Postgres, Redis, MySQL), Torque/PBS queues

Productivity Applications:

Atom, $\text{T}_{\text{E}}\text{X}$ ($\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$, $\text{B}_{\text{I}}\text{T}_{\text{E}}\text{X}$), Vim, Photoshop, Dreamweaver, Visio, Project, most common productivity packages (for Windows, OS X, and Linux platforms)

Operating Systems:

Ubuntu Linux, RedHat Linux variants, Apple OS X, Windows, BSD variants, Solaris

Certifications:

2001 Cisco CCDA

2000 Cisco CCNA

RESEARCH EXPERIENCE

Naval Postgraduate School

- Strategies for Large-Scale IPv6 Active Mapping* 5/2017–Present
- Funding agency: National Science Foundation 9/2019–8/2022
 - Advance the state-of-the-art in high-speed network topology probing, solving issues of scale specific to the IPv6 Internet
- Resilience Analysis of Telecommunications Infrastructure in the USVI* 01/2019–12/2021
- Funding agency: DHS/FEMA 01/2019–12/2021
 - Architect and implement novel Internet measurement and analysis techniques to characterize communication infrastructure resilience before and after catastrophic hurricane events in the US Virgin Islands
- Distributed Platform for High-Speed Active Network Topology Discovery* 10/2017–Present
- Funding agency: Laboratory for Telecommunication Sciences 12/2017–12/2021
 - Architect and build worldwide scalable cloud platform for high-performance Internet topology measurements
- Underwater Masked Carrier Acoustic Communication* 10/2016–2020
- Funding agency: Naval Research Program 10/2016–01/2018
- Disruption Tolerant Networking for Military Wireless Communications* 10/2014–2019
- Funding agency: Naval Research Program 10/2015–01/2017
 - Evaluating suitability of current DTN implementations for use in USMC tactical Networks
- Software Development for Network Deception Technologies* 04/2017–09/2017
- Funding agency: Laboratory for Telecommunication Sciences 04/2017–09/2017
 - Advance the state-of-the-art in network deception detection
 - Use knowledge gained to improve resilience of network measurement techniques and mapping systems
 - Improve quality of network deception iteratively
- Understanding Resilience of Active Internet Measurements to Deception* 10/2014–03/2017
- Funding agency: Laboratory for Telecommunication Sciences 10/2014–03/2017
 - Advance the state-of-the-art in network deception detection
 - Use knowledge gained to improve resilience of network measurement techniques and mapping systems
 - Improve quality of network deception iteratively
- Crowd Sourced Formal Verification* 01/2013–09/2015
- Funding agency: DARPA
- Disruption Tolerant Networking for Military Wireless Communications* 12/2011–09/2014
- Funding agency: SPAWAR Systems Center Pacific 06/2014–09/2014
 - Funding agency: Office of Naval Research (ONR) 12/2011–09/2013

The University of Kansas, Information & Telecommunication Technology Center

- Multilayer Network Resilience Analysis and Experimentation on GENI* 08/2010–12/2011
- Funding agency: National Science Foundation (NSF) – EAGER
 - PI: Dr. James P.G. Sterbenz
- Aeronautical Network Telemetry Protocols* 05/2009–12/2011
- Funding agency: US Army PEO STRI contracting office – T&E/S&T program
 - PI: Dr. James P.G. Sterbenz
- Great Plains Environment for Network Innovation (GpENI)* 08/2008–12/2011
- Part of GENI, managed by the GENI Project Office (GPO) at BBN Technologies
 - Funding agency: National Science Foundation (NSF) – CISE
 - PI: Dr. James P.G. Sterbenz
- Weather Disruption-Tolerant Mesh Networking* 01/2008–12/2008
- Funding agency: Sprint
 - PI: Dr. Victor Frost
- Context Based Networking* 08/2007–05/2009
- Funding agency: Sprint
 - PI: Dr. James P.G. Sterbenz
- Postmodern Internetwork Architecture* 08/2006–07/2009
- Funding agency: National Science Foundation (NSF) – FIND
 - PI: Dr. James P.G. Sterbenz
- Development of an Integrated Bioinformatics Infrastructure* 01/2005–08/2006
- Funding agency: US Army – Edgewood Chemical and Biological Center
 - PI: Dr. Victor Frost
- ChatTrack* 08/2004–12/2004
- PI: Dr. Susan Gauch

PUBLICATIONS

Book Chapters

James P. G. Sterbenz, **Justin P. Rohrer**, Mohammed J.F. Alenazi, Truc Anh N. Nguyen, Egemen K. Çetinkaya, Hemanth Narra, Kamakshi S. Pathapati, and Kevin Peters. Disruption-tolerant airborne networks and protocols. In Kamesh Namuduri, Serge Chaumette, Jae H Kim, and James P. G. Sterbenz, editors, *UAV Networks and Communications*, chapter 4, pages 58–95. Cambridge University Press, 1st edition, January 2018.

Journal Papers

Matthieu Gouel, Kevin Vermeulen, Maxime Mouchet, **Justin P. Rohrer**, Olivier Fourmaux, and Timure Friedman. Zeph & Iris map the Internet: A resilient reinforcement learning approach to distributed IP route tracing. *SIGCOMM Computer Communication Review*, 52(1):2–9, mar 2022.

Justin P. Rohrer, Blake LaFever, and Robert Beverly. Empirical study of router IPv6 interface address distributions. *IEEE Internet Computing*, 20(4):36–45, July 2016.

Egemen K. Çetinkaya, Mohammed J.F. Alenazi, Andrew M. Peck, **Justin P. Rohrer**, and James P. G. Sterbenz. Multilevel resilience analysis of transportation and communication networks. *Springer Telecommunication Systems Journal*, 60(4):515–537, December 2015.

Justin P. Rohrer, Abdul Jabbar, and James P.G. Sterbenz. Path diversification for future internet end-to-end resilience and survivability. *Telecommunication Systems*, 56(1):49–67, May 2014.

Deep Medhi, Byrav Ramamurthy, Caterina Scoglio, **Justin P. Rohrer**, Egemen K. Çetinkaya, Ramkumar Cherukuri, Xuan Liu, Pragatheeswaran Angu, Andy Bavier, Cort Buffington, and James P.G. Sterbenz. The GpENI testbed: Network infrastructure, implementation experience, and experimentation. *Computer Networks*, 61(0):51–74, March 2014. Special issue on Future Internet Testbeds – Part I.

James P. G. Sterbenz, David Hutchison, Egemen K. Çetinkaya, Abdul Jabbar, **Justin P. Rohrer**, Marcus Schöller, and Paul Smith. Redundancy, diversity, and connectivity to achieve multilevel network resilience, survivability, and disruption tolerance (invited paper). *Springer Telecommunication Systems Journal*, 56:17–31, May 2014. (accepted April 2012).

James P.G. Sterbenz, Egemen K. Çetinkaya, Mahmood A. Hameed, Abdul Jabbar, Qian Shi, and **Justin P. Rohrer**. Evaluation of network resilience, survivability, and disruption tolerance: Analysis, topology generation, simulation, and experimentation (invited paper). *Springer Telecommunication Systems*, 52(2):705–736, February 2013. (published online 2011).

Justin P. Rohrer, Abdul Jabbar, Egemen K. Çetinkaya, Erik Perrins, and James P.G. Sterbenz. Highly-dynamic cross-layered aeronautical network architecture. *IEEE Transactions on Aerospace and Electronic Systems (TAES)*, 47(4):2742–2765, October 2011.

Abdul Jabbar, **Justin P. Rohrer**, Victor S. Frost, and James P. G. Sterbenz. Survivable millimeter-wave mesh networks. *Computer Communications (COMCOM)*, 34(16):1942–1955, October 2011.

James P. G. Sterbenz, David Hutchison, Egemen K. Çetinkaya, Abdul Jabbar, **Justin P. Rohrer**, Marcus Schöller, and Paul Smith. Resilience and survivability in communication networks: Strategies, principles, and survey of disciplines. *Computer Networks: Special Issue on Resilient and Survivable Networks (COMNET)*, 54(8):1245–1265, June 2010.

Lance Feagan, **Justin P. Rohrer**, Alexander Garrett, Heather Amthauer, Ed Komp, David Johnson, Adam Hock, Terry Clark, Gerald Lushington, Gary Minden, and Victor S. Frost. Bioinformatics process management: Information flow via a computational journal. *Source Code for Biology and Medicine*, 2(1):1–9, 2007.

Conference Papers

Kevin Vermeulen, **Justin P. Rohrer**, Robert Beverly, Olivier Fourmaux, and Timur Friedman. Diamond-Miner: Comprehensive discovery of the Internet's topology diamonds. In *Proceedings of USENIX Symposium on Networked Systems Design and Implementation (NSDI)*, pages 479–493, Santa Clara, CA, 2020.

Justin P. Rohrer. Effects of swarm density on multihop drone telemetry data. In *Proceedings of the International Telemetry Conference (ITC)*, pages 1–8, Las Vegas, NV, November 2019.

Jason R. Brown and **Justin P. Rohrer**. DTN routing protocols for drone swarm telemetry. In *Proceedings of the International Telemetry Conference (ITC)*, pages 1–10, Glendale, AZ, November 2018.

Robert Beverly, Ramakrishnan Durairajan, David Plonka, and **Justin P. Rohrer**. In the IP of the beholder: Strategies for active IPv6 topology discovery. In *Proceedings of the Internet Measurement Conference (IMC)*, pages 308–321, Boston, MA, October 2018. ACM.

Justin P. Rohrer. Geographic centroid routing for vehicular networks. In *Proceedings of the Seventh International Conference on Advances in Vehicular Systems, Technologies and Applications (VEHICULAR)*, pages 7–12, Venice, Italy, June 2018. IARIA.

Justin P. Rohrer and Andrew N. Mauldin. Implementation of epidemic routing with ip convergence layer in ns-3. In *Proceedings of the 2018 Workshop on ns-3 (WNS3)*, Surathkal, India, June 2018. ACM.

Alexis Pospischil and **Justin P. Rohrer**. Multihop routing of telemetry data in drone swarms. In *Proceedings of the International Telemetry Conference (ITC)*, Las Vegas, NV, October 2017.

Justin P. Rohrer. Effects of GPS error on geographic routing. In *Proceedings of the 26th International Conference on Computer Communications and Networks (ICCCN)*, Vancouver, Canada, August 2017. IEEE.

Justin P. Rohrer and Kevin M. Killeen. Geolocation assisted routing protocols for vehicular networks. In *Proceedings of the 5th IEEE International Conference on Connected Vehicles (ICCVE)*, Seattle, WA, September 2016.

Erik C. Rye, **Justin P. Rohrer**, and Robert Beverly. Revisiting as-level graph reduction. In *Eighth IEEE International Workshop on Network Science for Communication Networks (NetSciCom)*, pages 840–845. IEEE, April 2016.

Truc Anh N. Nguyen, **Justin P. Rohrer**, and James P.G. Sterbenz. ResTP: A transport protocol for FI resilience. In *The 10th International Conference on Future Internet (CFI)*, pages 9–12, New York, NY, USA, 2015. ACM.

Lance A. Alt, **Justin P. Rohrer**, and Geoffrey G. Xie. Demo: Application-transparent deployment of DTN via SmartNet. In *Proceedings of the 9th ACM MobiCom workshop on Challenged Networks*, pages 93–96. ACM, September 2014.

U. Tellioglu, G. G. Xie, **Justin P. Rohrer**, and C. Prince. Whale of a crowd: Quantifying the effectiveness of crowd-sourced serious games. In *Computer Games: AI, Animation, Mobile, Multimedia, Educational and Serious Games (CGAMES)*, pages 1–7, July 2014.

Justin P. Rohrer and Geoffrey G. Xie. DTN hybrid networks for vehicular communications. In *Proceedings of the IEEE 2nd International Conference on Connected Vehicles*, pages 114–120, Las Vegas, NV, December 2013.

Mohammed J.F. Alenazi, Santosh Ajith Gogi, Dongsheng Zhang, Egemen K. Çetinkaya, **Justin P. Rohrer**, and James P. G. Sterbenz. Implementation of aeronautical network protocols. In *Proceedings of the AIAA Infotech@Aerospace Conference*, Boston, MA, August 2013.

Robert Beverly, William Brinkmeyer, Matthew Luckie, and **Justin P. Rohrer**. IPv6 alias resolution via induced fragmentation. In *Proceedings of the 14th Conference on Passive and Active Network Measurement (PAM)*, March 2013.

Justin P. Rohrer, Kamakshi S. Pathapati, Truc Anh N. Nguyen, and James P. G. Sterbenz. Opportunistic transport for disrupted airborne networks. In *Proceedings of the IEEE Military Communications Conference (MILCOM)*, pages 737–745, Orland, FL, USA, October 29–November 1 2012.

Justin P. Rohrer and Geoffrey G. Xie. DTN gateway architecture for partially disconnected telemetry environments. In *Proceedings of the International Telemetry Conference (ITC)*, San Diego, CA, October 2012.

Kamakshi S. Pathapati, **Justin P. Rohrer**, and James P.G. Sterbenz. Comparison of adaptive transport layer error-control mechanisms for highly-dynamic airborne telemetry networks. In *Proceedings of the International Telemetry Conference (ITC)*, San Diego, CA, October 2012.

Santosh Ajith Gogi, Dongsheng Zhang, Egemen K. Çetinkaya, **Justin P. Rohrer**, and James P. G. Sterbenz. Implementation of the AeroTP transport protocol in python. In *Proceedings of the International Telemetry Conference (ITC)*, San Diego, CA, October 2012.

Egemen K. Çetinkaya, Mohammed J.F. Alenazi, **Justin P. Rohrer**, and James P. G. Sterbenz. Topology connectivity analysis of internet infrastructure using graph spectra. In *Proceedings of the 4th IEEE/IFIP International Workshop on Reliable Networks Design and Modeling (RNDM)*, St. Petersburg, October 2012.

Mohammed J. F. Alenazi, Egemen K. Çetinkaya, **Justin P. Rohrer**, and James P. G. Sterbenz. Implementation of the AeroRP and AeroNP protocols in Python. In *Proceedings of the International Telemetry Conference (ITC)*, San Diego, CA, October 2012.

Egemen K. Çetinkaya, **Justin P. Rohrer**, Abdul Jabbar, Mohammed J.F. Alenazi, Dongsheng Zhang, Dan S. Broyles, Kamakshi S. Pathapati, Hemanth Narra, Kevin Peters, Santosh Ajith Gogi, and James P. G. Sterbenz. Protocols for highly-dynamic airborne networks. In *Proceedings of the 18th ACM Annual International Conference on Mobile Computing and Networking (MobiCom)*, Istanbul, August 2012. extended abstract.

Egemen K. Çetinkaya, **Justin P. Rohrer**, and James P.G. Sterbenz. Resilience of backbone provider networks. In *IEEE INFOCOM Student Workshop*, Orlando, FL, March 2012.

Justin P. Rohrer, Egemen K. Cetinkaya, Hemanth Narra, Dan S. Broyles, Kevin Peters, and James P. G. Sterbenz. AeroRP performance in highly-dynamic airborne networks using 3D gauss-markov mobility model. In *Proceedings of the IEEE Military Communications Conference (MILCOM)*, Baltimore, MD, USA, November 7–10 2011.

Mohammed J.F. Alenazi, Santosh Ajith Gogi, Dongsheng Zhang, Egemen K. Çetinkaya, **Justin P. Rohrer**, and James P. G. Sterbenz. ANTP protocol suite software implementation architecture in python. In *International Telemetry Conference (ITC)*, Las Vegas, NV, October 2011.

Kamakshi S. Pathapati, Truc Anh N. Nguyen, **Justin P. Rohrer**, and James P.G. Sterbenz. Performance analysis of the AeroTP transport protocol for highly-dynamic airborne telemetry networks. In *Proceedings of the International Telemetry Conference (ITC)*, Las Vegas, NV, October 2011. (awarded **Best Graduate Student Paper**).

Justin P. Rohrer and James P. G. Sterbenz. Predicting topology survivability using path diversity. In *Proceedings of the IEEE/IFIP International Workshop on Reliable Networks Design and Modeling (RNDM)*, pages 95–101, Budapest, Hungary, October 5–7 2011.

Justin P. Rohrer, Egemen K. Çetinkaya, and James P.G. Sterbenz. Resilience experiments in the GpENI programmable future internet testbed. In *Proceedings of the 11th Würzburg Workshop on IP: Joint ITG and Euro-NF Workshop “Visions of Future Generation Networks” (EuroView2011)*, pages 29–30, Würzburg, Germany, August 2011.

Justin P. Rohrer, Egemen K. Çetinkaya, and James P. G. Sterbenz. Progress and challenges in large-scale future internet experimentation using the GpENI programmable testbed. In *The 6th ACM International Conference on Future Internet Technologies (CFI)*, pages 46–49, Seoul, Korea, June 2011.

Hemanth Narra, Yufei Cheng, Egemen K. Çetinkaya, **Justin P. Rohrer**, and James P.G. Sterbenz. Destination-sequenced distance vector (DSDV) routing protocol implementation in ns-3. In *Proceedings of the ICST SIMUTools Workshop on ns-3 (WNS3)*, Barcelona, Spain, March 2011.

James P.G. Sterbenz, Egemen K. Çetinkaya, Mahmood A. Hameed, Abdul Jabbar, and **Justin P. Rohrer**. Modelling and analysis of network resilience (invited paper). In *Proceedings of the Third IEEE International Conference on Communication Systems and Networks (COMSNETS)*, pages 1–10, Bangalore, India, January 2011.

Justin P. Rohrer, Abdul Jabbar, Egemen K. Çetinkaya, and James P.G. Sterbenz. Airborne telemetry networks: Challenges and solutions in the ANTP suite. In *Proceedings of the IEEE Military Communications Conference (MILCOM)*, pages 74–79, San Jose, CA, USA, November 2010.

Kamakshi S. Pathapati, **Justin P. Rohrer**, and James P. G. Sterbenz. Edge-to-edge ARQ: Transport-layer reliability for airborne telemetry networks. In *Proceedings of the International Telemetering Conference (ITC)*, San Diego, CA, October 2010.

James P. G. Sterbenz, Deep Medhi, Byrav Ramamurthy, Caterina Scoglio, David Hutchison, Bernhard Plattner, Tricha Anjali, Andrew Scott, Cort Buffington, Gregory E. Monaco, Don Gruenbacher, Rick McMullen, **Justin P. Rohrer**, John Sherrell, Pragatheeswaran Angu, Ramkumar Cherukuri, Haiyang Qian, and Nidhi Tare. The Great plains Environment for Network Innovation (GpENI): A programmable testbed for future internet architecture research. In *Proceedings of the 6th International Conference on Testbeds and Research Infrastructures for the Development of Networks & Communities (TridentCom)*, pages 428–441, Berlin, Germany, May 18–20 2010.

Justin P. Rohrer, Ramya Naidu, and James P. G. Sterbenz. Multipath at the transport layer: An end-to-end resilience mechanism. In *Proceedings of the IEEE/IFIP International Workshop on Reliable Networks Design and Modeling (RNDM)*, pages 1–7, St. Petersburg, Russia, October 2009.

Justin P. Rohrer and James P. G. Sterbenz. Performance and disruption tolerance of transport protocols for airborne telemetry networks. In *Proceedings of the International Telemetering Conference (ITC) 2009*, Las Vegas, NV, October 2009.

Justin P. Rohrer, Abdul Jabbar, and James P. G. Sterbenz. Path diversification: A multipath resilience mechanism. In *Proceedings of the IEEE 7th International Workshop on the Design of Reliable Communication Networks (DRCN)*, pages 343–351, Washington, DC, USA, October 2009.

Abdul Jabbar, **Justin P. Rohrer**, Andrew Oberthaler, Egemen K. Çetinkaya, Victor S. Frost, and James P. G. Sterbenz. Performance comparison of weather disruption-tolerant cross-layer routing algorithms. In *Proc. IEEE INFOCOM 2009. The 28th Conference on Computer Communications*, pages 1143–1151, April 2009.

Justin P. Rohrer, Abdul Jabbar, Erik Perrins, and James P. G. Sterbenz. Cross-layer architectural framework for highly-mobile multihop airborne telemetry networks. In *Proceedings of the IEEE Military Communications Conference (MILCOM)*, pages 1–9, San Diego, CA, USA, November 2008.

Justin P. Rohrer, Erik Perrins, and James P. G. Sterbenz. End-to-end disruption-tolerant transport protocol issues and design for airborne telemetry networks. In *Proceedings of the International Telemetering Conference*, San Diego, CA, October 27–30 2008. (awarded **Best Paper**).

Justin P. Rohrer, Weichao Wang, and James P. G. Sterbenz. Homogeneous security in heterogeneous networks: Towards a generic security management protocol. In *Proceedings of the IEEE Military Communications Conference (MILCOM)*, pages 1–6, Orlando, FL, USA, October 29-31 2007.

Patents & Technical Reports

Justin P. Rohrer and Geoffrey G. Xie. Gateway router and method for application-aware automatic network selection, 2016. US Patent 9,419,920 B1.

Erik C. Rye and **Justin P. Rohrer**. Graph reduction for emulated network experimentation. Technical Report NPS-CS-15-001, Naval Postgraduate School, Monterey, CA, May 2015.

James P.G. Sterbenz, **Justin P. Rohrer**, and Egemen K. Çetinkaya. Multilayer network resilience analysis and experimentation on GENI. ITTC Technical Report ITTC-FY2011-TR-61349-01, The University of Kansas, Lawrence, KS, July 2010.

Victor S. Frost, Terry Clark, Susan Gauch, Gerald Lushington, Gary Minden, Ed Komp, Adam Hock, David Johnson, Lance Feagan, Alexander Garrett, **Justin P. Rohrer**, Heather Amthauer, and Andrew Ozor. Bioinformatics computational journal: User guide. Technical Report ITTC-FY2008-TR-38270-04, Information Telecommunication and Technology Center, University of Kansas, Lawrence, KS, 2007.

Citation analysis on Google Scholar (<http://scholar.google.com/citations?user=aOy7jnQAAAAJ>)

SERVICE

National Science Foundation

2022 Panelist

2020 Panelist

Conference

2022 IEEE DRCN *TPC Member*

2022 ICC NGNI 2022 *TPC Member*

2021 IEEE GLOBECOM NGNI 2021 *TPC Member*

2021 IEEE DRCN *TPC Member*

2020 IARIA VEHICULAR *TPC Member*

2020 IEEE DRCN *TPC Member*

2019 IEEE GLOBECOM NGNI 2019 *TPC Member*

2019 ACM MSWiM *TPC Member*

2019 IARIA VEHICULAR *TPC Member*

2019 IEEE DRCN *TPC Member*

2018 IARIA VEHICULAR *TPC Member*

2018 ACM MSWiM *TPC Member*

2018 IEEE GLOBECOM NGNI 2018 *TPC Member*

2018 Passive and Active Measurement conference (PAM) *TPC Member*

2017 IARIA VEHICULAR *TPC Member*

2017 ACM MSWiM *TPC Member*

2017 IEEE GLOBECOM NGNI 2017 *TPC Member*

2016 ACM/IEEE/IFAC/TRB ICCVE 2016 *TPC Member*

2016 IEEE Workshop on Network Measurements (WNM) 2016 *TPC Member*

2016 *IEEE International Conference on Electronic Design (ICED) Reviewer*

2016 IEEE GLOBECOM NGNI 2016 *TPC Member*

2015 ACM/IEEE/IFAC/TRB ICCVE 2015 *TPC Member*

2015 IEEE GLOBECOM NGNI 2015 *TPC Member*

2014 ACM/IEEE/IFAC/TRB ICCVE 2014 *TPC Member*

2014 IEEE GLOBECOM NGNI 2014 *TPC Member*

2013 ACM/IEEE/IFAC/TRB ICCVE 2013 *TPC Member*

2013 IEEE Workshop on Network Measurements (WNM) 2013 *TPC Member*

2013 IEEE GLOBECOM NGNI 2013 *TPC Member*

2012 ACM/IEEE/IFAC/TRB ICCVE 2012 *TPC Member*

2012 IEEE GLOBECOM NGNI 2012 *TPC Member*

2010 IWSOS 2011 *shadow TPC member*

2008 NSF-FIND *Student conference planning board*

Referee

2020 *IEEE Transactions on Networking (TON)*

2019 *IEEE Communications Magazine*
 2018 *IEEE Transactions on Aerospace and Electronic Systems (TAES)*
 2018 *IEEE Communications Magazine*
 2017 *IEEE Transactions on Network Science and Engineering (TNSE)*
 2017 *IEEE Transactions on Mobile Computing (TMC)*
 2017 *Springer Annals of Telecommunications (ANTE)*
 2016 *Elsevier Computer Networks journal (COMNET)*
 2014 *IEEE Communications Magazine*
 2014 *AGH Computer Science Journal*
 2014 *KICS/IEEE Journal of Communications and Networks*
 2013 *IEEE MILCOM conference*
 2013 *IEEE Transactions on Wireless Communications journal*
 2012 *IEEE Symposium on Wireless Technology & Applications (ISWTA)*
 2012 *IFIP/TC6 Networking conference*
 2011 *IEEE GreenCom conference*
 2011 *KKITS/ETRI ICCCT conference*
 2011 *EURASIP Journal on Wireless Communications and Networking*
 2011 *IEEE DRCN conference*
 2010 *IEEE FutureNet-III conference*
 2010 *IEEE/IFIP RNDM conference*
 2009 *Elsevier COMNET journal*
 2009 *IEEE DRCN conference*
 2009 *IEEE GLOBECOM NGNI conference*
 2009 *International Journal of Computer Mathematics*
 2009 *IEEE ICCCN NAP conference*
 2008 *IEEE IWSOS conference*

Professional

01/2010–12/2010 Vice-Chair of *IEEE Computer Society, Kansas City section*
 01/2009–12/2009 Treasurer of *IEEE Computer Society, Kansas City section*
 01/2008–12/2008 Secretary of *IEEE Computer Society, Kansas City section*
 05/2003–05/2004 Chairman of *IEEE Student Chapter at RPI*
 01/2003–12/2003 Bridge Correspondent of *Eta Kappa Nu, Beta Nu chapter (RPI)*

Academic

02/2017–Present NPS Information Technology Task Force
 08/2003–05/2004 RPI ECSE Curriculum Committee member (first student member)
 08/2003–05/2004 RPI School of Engineering Student Advisory Council

Contributor to Wikipedia

- Contributions to articles on network resilience and survivability

August 27, 2022