

CURRICULUM VITAE: LOUKAS LAZOS

CHRONOLOGY OF EDUCATION

- Ph.D. Aug 2006 **Electrical Engineering**
University of Washington, Seattle, WA, USA
Dissertation: “Securing Network Services for Wireless Ad Hoc and Sensor Networks”
Major field: Network Security
Advisor: Radha Poovendran
- M.S. Aug 2003 **Electrical Engineering**
University of Washington, Seattle, WA, USA
Major fields: Computer Networks and Network Security
Advisor: Radha Poovendran
- B.S. May 2000 **Electrical and Computer Engineering**
National Technical University of Athens, Athens, Greece
Thesis: “DECT Radio Coverage of the Athens Olympic Stadium”
Major fields: Digital Communications and Computer Networks
Advisor: Philippos Constantinou

CHRONOLOGY OF EMPLOYMENT

- Aug 13 – Present **Associate Professor**
Department of Electrical and Computer Engineering
University of Arizona
Tucson, AZ, USA
- Aug 07 – Jul 13 **Assistant Professor**
Department of Electrical and Computer Engineering
University of Arizona
Tucson, AZ, USA
- Oct 06 – Jul 07 **Postdoctoral Researcher**
Department of Electrical Engineering
University of Washington
Seattle, WA, USA

- Sep 01 – Aug 06 **Graduate Research Assistant**
Department of Electrical Engineering
University of Washington
Seattle, WA, USA
- Sep 00 – Jun 01 **Teaching Assistant**
Department of Electrical Engineering
University of Washington
Seattle, WA, USA
- Mar 00 – Jul 00 **Electrical Engineer**
School of Electrical and Computer Engineering
Mobile Radio-communications Laboratory
National Technical University of Athens
Athens, Greece

HONORS AND AWARDS

- National Science Foundation (NSF) CAREER Award, “Securing Channel Access in Multi-Channel Ad Hoc Networks,” 2009.

PUBLICATIONS/CREATIVE ACTIVITY (Published or Accepted)

Book Chapters (scholarly work)

- [1] **L. Lazos** and R. Poovendran, “Secure Localization for Wireless Sensor Networks using Range-Independent Methods,” in *Secure Localization and Time Synchronization for Wireless Sensor and Ad Hoc Networks*, Springer Verlag, New York, pp. 185 – 214, 2006.

Refereed Journal Publications

- [1] Y. Zhang, **L. Lazos**, K. Chen, B. Hu, and S. Shivaramaiah, “Multi-channel Medium Access Without Control Channels: A Full Duplex MAC Design,” *IEEE Transactions on Mobile Computing (TMC)*, Vol. 16, No. 4, pp. 1032–1046, 2017.
- [2] A. Proaño, **L. Lazos**, and M. Krunz “Traffic Decorrelation Techniques for Countering a Global Eavesdropper in WSNs,” to appear in *IEEE Transactions on Mobile Computing (TMC)*, Vol. 16, No. 3, pp. 857–871, 2017.
- [3] Y. Zhang, **L. Lazos**, and W. Kozma, “AMD: Audit-based Misbehavior Detection in Wireless Ad Hoc Networks,” to appear in *IEEE Transactions on Mobile Computing (TMC)*, Vol. 15, No. 8, pp. 1893–1907, 2016.

- [4] H. Rahbari, M. Krunz, and **L. Lazos**, “Swift Jamming Attack on Frequency Offset Estimation: The Achilles’ Heel of OFDM Systems,” to appear in *IEEE Transactions on Mobile Computing (TMC)*, Vol. 15, No. 5, pp. 1264–1278, 2016.
- [5] S. Liu, **L. Lazos**, and M. Krunz, “Time-Delayed Broadcasting for Defeating Inside Jammers,” *IEEE Transactions on Dependable and Secure Computing (TDSC)*, Vol. 12, No. 3, pp. 351– 365, 2015.
- [6] Y. Zhang and **L. Lazos** “Vulnerabilities of Cognitive Radio MAC Protocols and Countermeasures,” *IEEE Network*, Vol 27, No. 3, pp. 40 – 45, 2013.
- [7] S. Liu, **L. Lazos**, and M. Krunz, “Cluster-based Control Channel Allocation in Opportunistic Cognitive Radio Networks,” *IEEE Transactions on Mobile Computing (TMC)*, Vol. 11, No. 10, pp. 1436 – 1449, 2012.
- [8] S. Liu, **L. Lazos**, and M. Krunz, “Thwarting Control-Channel Jamming Attacks from Inside Jammers,” *IEEE Transactions on Mobile Computing (TMC)*, Vol. 11, No. 9, pp. 1545 – 1558, 2012.
- [9] A. Proaño and **L. Lazos**, “Packet-Hiding Methods for Preventing Selective Jamming Attacks,” *IEEE Transactions on Dependable and Secure Computing (TDSC)*, Vol. 9, No. 1, pp. 101 – 114, 2012.
- [10] M. Bradonjić and **L. Lazos**, “Graph-based Criteria for Spectrum-aware Clustering in Cognitive Radio Networks,” *Ad Hoc Networks*, Vol. 10, No. 1, pp. 75 – 94, 2012.
- [11] **L. Lazos** and M. Krunz, “Selective Jamming/Dropping Insider Attacks in Wireless Mesh Networks,” *IEEE Network*, Vol. 25, No. 1, pp. 30 – 34, 2011.
- [12] B. Alomair, **L. Lazos**, and R. Poovendran, “Securing Low-cost RFID Systems: an Unconditionally Secure Approach,” *Journal of Computer Security (JCS)*, Vol. 19, No. 2, pp. 229 – 257, 2011.
- [13] **L. Lazos**, R. Poovendran, and J. A. Ritcey, “Analytic Evaluation of Target Detection in Heterogeneous Wireless Sensor Networks,” *ACM Transactions on Sensor Networks (TOSN)*, Vol. 5, No. 2, pp. 1 – 38, 2009.
- [14] **L. Lazos**, R. Poovendran, and J. A. Ritcey, “Detection of Mobile Targets on the Plane and in Space using Heterogeneous Sensor Networks,” *Wireless Networks (WINET)*, Vol. 15, No. 5, pp. 667 – 690, 2009.
- [15] J. Salido, **L. Lazos**, and R. Poovendran, “Energy and Bandwidth-Efficient Key Distribution in Wireless Ad-Hoc Networks: A Cross-Layer Approach,” *IEEE/ACM Transactions on Networking (TON)*, Vol. 15, No. 6, pp. 1527 – 1540, 2007.
- [16] R. Poovendran and **L. Lazos**, “A Graph Theoretic Framework for Preventing the Wormhole Attack in Wireless Ad Hoc Networks,” *Wireless Networks (WINET)*, Vol. 13, No. 1, pp. 27 – 59, 2007.

- [17] **L. Lazos** and R. Poovendran, “Power Proximity Based Key Management for Secure Multicast in Ad Hoc Networks,” *Wireless Networks (WINET)*, Vol. 13, No. 1, pp. 127 – 148, 2007.
- [18] **L. Lazos** and R. Poovendran, “Stochastic Coverage in Heterogeneous Sensor Networks,” *ACM Transactions on Sensor Networks (TOSN)*, Vol. 2, No. 3, pp. 325 – 358, 2006.
- [19] **L. Lazos** and R. Poovendran, “High Resolution Localization for Wireless Sensor Networks,” *IEEE Journal on Selected Areas in Communications (JSAC), Special Issue on Network Security*, Vol. 24, No. 2, pp. 233 – 246, 2006.
- [20] **L. Lazos** and R. Poovendran, “SeRLoc: Robust Localization for Wireless Sensor Networks,” *ACM Transactions on Sensor Networks (TOSN)*, Vol. 1, No. 1, pp. 73 – 100, 2005.

Refereed Conference/Symposium/Workshop Publications

- [1] S. Lu, R. Lysecky, and **L. Lazos**, “FEAL: Fine-Grained Evaluation of Active Learning in Collaborative Learning Spaces,” to appear in *ASEE Annual Conference & Exposition*, 2017.
- [2] S. Shivaramaiah, G. Calis, , O. Koyluogly, and **L. Lazos**, “Threshold-based File Maintenance Strategies for Mobile Cloud Storage Systems,” to appear in *Proceedings of the IEEE Global Communications Conference, Exhibition and Industry Forum (GLOBECOMM)*, 2016.
- [3] N. Ghose and **L. Lazos**, “Verifying ADS-B Navigation Information Through Doppler Shift Measurements,” in *Proceedings of the 34th IEEE/AIAA Digital Avionics Systems Conference (DASC)*, 11 pages, 2015, DOI: 10.1109/DASC.2015.7311412 (**2nd place best graduate student paper award**).
- [4] B. Hu, Y. Zhang, and **L. Lazos**, “PHYVOS: Physical Layer Voting for Secure and Fast Cooperation,” in *Proceedings of the IEEE Conference on Communications and Network Security (CNS)*, 9 pages, 2015, DOI: 10.1109/CNS.2015.7346834.
- [5] J. J. Fowler, T. Johnson, P. Simonetto, M. Schneider, C. Acedo, S. Kobourov, and **L. Lazos**, “IMap: Visualizing Network Activity over Internet Maps,” *Proceedings of the 11th Workshop on Visualization for Cyber Security (VIZSEC)*, pp. 80 – 87, 2014.
- [6] T. Johnson and **L. Lazos**, “Network Anomaly Detection Using Autonomous System Flow Aggregates,” in *Proceedings of the IEEE Global Communications Conference, Exhibition and Industry Forum (GLOBECOMM)*, pp. 544 – 560, 2014.
- [7] Y. Zhang, **L. Lazos**, K. Chen, B. Hu, and S. Shivaramaiah, “FD-MMAC: Combating Multi-Channel Hidden and Exposed Terminals Using a Single Transceiver,” in *Proceedings of the IEEE International Conference on Computer Communications (INFOCOM)*, pp. 2742 – 2750, 2014.
- [8] H. Rahbari, M. Krunz, and **L. Lazos**, “Security Vulnerability and Countermeasures of Frequency Offset Correction in 802.11a Systems,” in *Proceedings of the IEEE International Conference on Computer Communications (INFOCOM)*, pp. 1015 – 1023, 2014.

- [9] Q. Zhang and **L. Lazos**, “Collusion-Resistant Query Anonymization for Location-Based Services,” in *Proceedings of the IEEE International Conference on Communications (ICC)*, pp. 768 – 774, 2014.
- [10] Y. Zhang and **L. Lazos**, “Countering Selfish Misbehavior in Multi-channel MAC Protocols,” in *Proceedings of the IEEE International Conference on Computer Communications (INFOCOM)*, pp. 2787 – 2795, 2013.
- [11] A. Proaño and **L. Lazos**, “Perfect Contextual Information Privacy in WSNs under Colluding Eavesdroppers,” in *Proceedings of the 6th ACM Conference on Wireless Network Security (WiSec)*, pp. 89 – 94, 2013.
- [12] **L. Lazos**, S. Liu, and M. Krunz, “Thwarting Inside Jamming Attacks on Wireless Broadcast Communications,” in *Proceedings of the 4th ACM Conference on Wireless Network Security (WiSec)*, pp. 29 – 40, 2011.
- [13] A. Proaño and **L. Lazos**, “Selective Jamming Attacks in Wireless Networks,” in *Proceedings of the IEEE International Conference on Communications (ICC)*, pp. 1 – 6, 2010.
- [14] B. Alomair, **L. Lazos**, and R. Poovendran, “Securing Low-Cost RFID Systems: An Unconditionally Secure Approach,” in *Proceedings of the 6th International Workshop on RFID Security (RFIDsec)*, pp. 1 – 17, 2010.
- [15] W. Kozma and **L. Lazos**, “Dealing with Liars: Misbehavior Identification Based on Rényi-Ulam Games,” in *Proceedings of the 5th International ICST Conference on Security and Privacy in Communication Networks (SecureComm)*, pp. 207 – 227, 2009.
- [16] **L. Lazos**, S. Liu, and M. Krunz, “Spectrum Opportunity-Based Control Channel Assignment in Cognitive Radio Networks,” in *Proceedings of the 6th Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON)*, pp. 1 – 9, 2009.
- [17] **L. Lazos**, S. Liu, and M. Krunz, “Mitigating Control Channel Attacks in Multi-channel Ad-Hoc Networks,” in *Proceedings of the 2nd ACM Conference on Wireless Network Security (WiSec)*, pp. 169 – 180, 2009.
- [18] W. Kozma and **L. Lazos**, “REAct: Resource-Efficient Accountability for Node Misbehavior in Ad Hoc Networks based on Random Audits,” in *Proceedings of the 2nd ACM Conference on Wireless Network Security (WiSec)*, pp. 103 – 110, 2009.
- [19] W. Kozma and **L. Lazos**, “Reactive Identification of Misbehavior in Ad Hoc Networks Based on Random Audits,” in *Proceedings of the 5th Annual IEEE Communications Society Conference on Sensor, Mesh, and Ad Hoc Communications and Networks (SECON)*, pp. 612 – 614, 2008.
- [20] B. Alomair, **L. Lazos**, and R. Poovendran, “Passive Attacks on a Class of Authentication Protocols for RFID,” in *Proceedings of the International Conference on Information Security and Cryptology (ICISC)*, pp. 102 – 115, 2007.

- [21] **L. Lazos**, R. Poovendran, and J. A. Ritcey, “Probabilistic Detection of Mobile Targets in Heterogeneous Sensor Networks,” in *Proceedings of the 6th International Symposium on Information Processing in Sensor Networks (IPSN)*, pp. 519 – 528, 2007.
- [22] **L. Lazos**, R. Poovendran, and J. A. Ritcey, “On the Deployment of Heterogeneous Sensor Networks for Detection of Mobile Targets,” in *Proceedings of the 5th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt)*, pp. 1 – 10, 2007.
- [23] **L. Lazos** and R. Poovendran, “Coverage in Heterogeneous Sensor Networks,” in *Proceedings of the 4th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt)*, pp. 1 – 10, 2006.
- [24] **L. Lazos**, R. Poovendran, C. Meadows, P. Syverson, and L. W. Chang, “Preventing Wormhole Attacks on Wireless Ad Hoc Networks: A Graph Theoretic Approach,” in *Proceedings of the IEEE Wireless Communications and Networking Conference (WCNC)*, Vol. 2, pp. 1193 – 1199, 2005.
- [25] **L. Lazos**, S. Čapkun, and R. Poovendran, “ROPE: Robust Position Estimation in Wireless Sensor Networks,” in *Proceedings of the 4th International Symposium on Information Processing in Sensor Networks (IPSN)*, pp. 324 – 331, 2005.
- [26] **L. Lazos** and R. Poovendran, “SeRLoc: Secure Range-Independent Localization for Wireless Sensor Networks,” in *Proceedings of the ACM Workshop on Wireless Security (WiSe)*, pp. 21 – 30, 2004.
- [27] **L. Lazos**, J. Salido, and R. Poovendran, “VP3: Using Vertex Path and Power Proximity for Energy Efficient Key Distribution,” in *Proceedings of the IEEE Vehicular Technology Conference (VTC)*, pp. 1228 – 1232, 2004.
- [28] **L. Lazos** and R. Poovendran, “Cross-Layer Design for Energy-Efficient Secure Multicast Communications in Ad Hoc Networks,” in *Proceedings of the IEEE International Conference on Communications (ICC)*, Vol. 6, pp. 3633 – 3639, 2004.
- [29] **L. Lazos** and R. Poovendran, “Energy-Aware Secure Multicast Communication in Ad-hoc Networks Using Geographic Location Information,” in *Proceedings of the IEEE International Conference on Acoustics Speech and Signal Processing (ICASSP)*, Vol. 4, pp. 201 – 204, 2003.
- [30] **L. Lazos** and R. Poovendran, “Secure Broadcast in Energy-Aware Wireless Sensor Networks,” in *Proceedings of the IEEE International Symposium on Advances in Wireless Communications (ISWC)*, pp. 151 – 152, 2002.

Non-Refereed Conference/Symposium/Workshop Publications

- [1] A. Proaño and **L. Lazos**, “Hiding Contextual Information in WSNs,” in *Proceedings of the 3rd IEEE International Workshop on Data Security and Privacy in Wireless Networks (D-SPAN)*, 6 pages, 2012, (Invited paper).

- [2] S. Chandrashekar and **L. Lazos**, “A Primary User Authentication System for Mobile Cognitive Radio Networks,” in *Proceedings of the 3rd International Workshop on Cognitive Radio and Advanced Spectrum Management (COGART)*, 5 pages, 2011, (Invited paper).

Pending Submissions

- [1] N. Ghose, B. Hu, Y. Zhang, and **L. Lazos**, “Secure Physical Layer Voting,” submitted to *IEEE Transactions on Mobile Computing*, 14 pages, 2016.
- [2] Y. Zhang and **L. Lazos** “Misbehavior in Multi-channel MAC Protocols,” submitted to *IEEE Transactions on Dependable and Secure Computing (TDSC)*, 14 pages, 2016.

RESEARCH GRANTS AND CONTRACTS

EXTERNAL GRANTS

- Title: “TWC: Medium: Leakage of Communications Signatures: Analysis of Eavesdropping Attacks and Proactive Countermeasures”
PIs: Marwan Krunz (PI) and Loukas Lazos (co-PI)
Sponsor: National Science Foundation (NSF)
Dates: 10/01/2014 – 09/30/2018
Responsibility: 50%
Total Award Amount: \$660,000
- Title: “Blinding Eve: Methods for Concealing Wireless Communications in Mobile Coalitions”
PIs: Marwan Krunz (PI) and Loukas Lazos (co-PI)
Sponsor: Army Research Office (ARO)
Dates: 08/01/2013 – 07/30/2016
Responsibility: 50%
Total Award Amount: \$459,998
- Title: “Putting Network Security on the Map: Visualizing Network Security with a Unified Map Metaphor (Phase II)”
PIs: Stephen Kobourov (PI), Christian Collberg (co-PI), Loukas Lazos (co-PI), and Srinivasan Ramasubramanian (co-PI)
Sponsor: Office of Naval Research (ONR)
Dates: 03/27/2012 – 09/30/2015
Responsibility: 25%
Total Award Amount: \$3,558,298
- Title: “EAGER: Human-centric Predictive Analytics of Cyber-threats: a Temporal Dynamics Approach”
PIs: Brinton Milward (PI), Ronald Breiger (co-PI), Loukas Lazos (co-PI), and Jerzy Rozenblit (co-PI)
Sponsor: National Science Foundation (NSF)

- Dates: 09/01/2013 – 08/31/2015
 Responsibility: 25%
 Total Award Amount: \$200,000
- Title: “CAREER: Securing Channel Access in Multi-Channel Ad Hoc Networks”
 PI: Loukas Lazos
 Sponsor: National Science Foundation (NSF)
 Dates: 09/01/2009 – 08/31/2014
 Responsibility: 100%
 Total Award Amount: \$405,000
 - Title: “TC: Small: Enemies from Within: Thwarting Sophisticated Insider Attacks in Wireless Networks”
 PIs: Loukas Lazos (PI) and Marwan Krunz (co-PI)
 Sponsor: National Science Foundation (NSF)
 Dates: 07/15/2010 – 06/30/2014
 Responsibility: 50%
 Total Award Amount: \$499,534
 - Title: “EAGER: Man-at-the-End Attacks: Defenses and Evaluation Techniques”
 PIs: Christian Collberg (PI), Saumya Debray (Co-PI), and Loukas Lazos (Co-PI)
 Role: Co-PI
 Sponsor: National Science Foundation (NSF)
 Dates: 09/01/2011 – 08/31/2014
 Responsibility: 33%
 Total Award Amount: \$285,649
 - Title: “Putting Network Security on the Map: Visualizing Network Security with a Unified Map Metaphor (Phase I)”
 PIs: Stephen Kobourov (PI), Christian Collberg (co-PI), Loukas Lazos (co-PI), and Srinivasan Ramasubramanian (co-PI)
 Sponsor: Office of Naval Research (ONR)
 Dates: 02/25/2011 – 10/25/2011
 Responsibility: 25%
 Total Award Amount: \$363,751
 - Title: “Secure Opportunistic Spectrum Access in Cognitive Radio Networks”
 PIs: Loukas Lazos (PI) and Marwan Krunz (co-PI)
 Sponsor: National Science Foundation (NSF): I/UCRC Communication Circuits and System Research Center
 Dates: 08/01/2008 – 07/30/2009
 Responsibility: 50%
 Total Award Amount: \$60,000

INTERNAL GRANTS

- Title: “Exploiting Nanomaterials for End-to-End Cybersecurity Solutions”
 PIs: Bertrand Cambou (PI), Michael Kozick (co-PI) Loukas Lazos (co-PI)

Sponsor: Arizona Board of Regents
Dates: 07/01/2016 – 01/31/2018
Responsibility: 33%
Total Award Amount: \$500,000

SELECTED INVITED TALKS AND SEMINARS

Keynote/Panel Presentations

- L. Lazos, *Keynote title*: “Securing Channel Access in Wireless Ad Hoc Networks,” *1st Workshop on Security of Autonomous and Spontaneous Networks (SETOP)*, Loctudy, France, Oct. 2008.
- L. Lazos, *Panel title*: “Privacy in Future Computation and Communication Platforms,” *6th IEEE WoWMoM Workshop on Autonomic and Opportunistic Communications (AOC) and 3rd IEEE International Workshop on Data Security and Privacy in Wireless Networks (D-SPAN)*, San Francisco, CA, Jun. 2012.

Invited Seminars

- Coordinating Multi-user Wireless Access without Control Channels, UCN@Sophia Labex Seminar, Eurecom, Nice, France, Feb. 2015.
- Jam Me if You Can: Mitigating the Impact of Inside Jammers, The Center for Education and Research on Information Assurance and Security (CERIAS) Seminar, Purdue University, West Lafayette, IN, Nov. 2011.
- Jam Me if You Can: Mitigating the Impact of Inside Jammers, Computer Science Department Lecturer Series Seminar, University of California, Irvine (UCI), Irvine, CA, Oct. 2011.
- Assignment and Protection of Control Channels in Cognitive Radio Networks, IEEE Seminar, National Technical University of Athens, Greece, Jan. 2010.
- Dealing with Liars: Misbehavior Identification via Rényi-Ulam Games, Computer Science Research Colloquium, The University of Arizona, Tucson, AZ, Oct. 2009.
- Enabling Secure Coordination of Cyber-Physical Systems, Army Research Office Workshop on Cyber-Physical Systems Security, Seattle, WA, Aug. 2009.
- Securing Spectrum Access in Cognitive Radio Networks, NSF: I/UCRC Communication Circuits and System Research Center (Connection One) Semi-Annual Meeting, San Diego, CA, May 2009.
- Securing Opportunistic Spectrum Access in Cognitive Radio Networks, NSF: I/UCRC Communication Circuits and System Research Center (Connection One) Semi-Annual Meeting, Scottsdale, AZ, Jan. 2009.

- Analytical Evaluation of Coverage and Target Detection in Heterogeneous Wireless Sensor Networks, Systems and Industrial Engineering Seminar, The University of Arizona, Tucson, AZ, Nov. 2007.

PROFESSIONAL SERVICE

General Chair and Program Chair:

- Area TPC Chair, IEEE Conference on Communications and Network Security (IEEE CNS' 14), San Francisco, USA, 2014.
- TPC Co-chair, IEEE Global Communications Conference, Exhibition, and Industry Forum (GLOBECOM' 13), Communications and Information Systems Security Symposium, Atlanta, GA, USA, 2013.
- TPC Co-chair, IEEE International Workshop on Data Security and Privacy in Wireless Networks (D-SPAN' 13), Madrid, Spain, 2013.
- General Co-chair, ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec' 12), Tucson, AZ, USA, 2012.

Executive Committee:

- Workshop Chair, IEEE Conference on Communications and Network Security (IEEE CNS' 16), Philadelphia, USA, 2017.
- Poster Chair, IEEE Conference on Communications and Network Security (IEEE CNS' 16), Philadelphia, USA, 2016.
- Poster Chair, IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS' 12), Hangzhou, China, 2012.
- Publicity Chair, ACM Conference on Wireless Network Security (WiSec' 09), Zurich, Switzerland, 2009.
- Website Chair, International ICST Conference on Broadband Communications, Networks, and Systems (BROADNETS' 09), Madrid, Spain, 2009.

Technical Program Committee:

- ACM Conference in Security and Privacy in Wireless and Mobile Networks (WiSec' 17), Boston, USA, 2017.
- ACM Asia Conference on Computer and Communications Security (ASIACCS) Abu Dhabi, UAE, 2017.

- IEEE GLOBECOM, Singapore, 2017.
- IEEE ICC, Kuala Lumpur, Malaysia, 2016.
- ACM Conference in Security and Privacy in Wireless and Mobile Networks (WiSec’16), Darmstadt, Germany, 2016.
- IEEE ICC, London, UK, 2015.
- ACM Conference in Security and Privacy in Wireless and Mobile Networks (WiSec’15), New York, USA, 2015.
- ACM Conference in Security and Privacy in Wireless and Mobile Networks (WiSec’14), Oxford, UK, 2014.
- IEEE ICC, Sydney, Australia, 2014.
- International Symposium on Algorithms and Experiments for Sensor Systems, Wireless Networks and Distributed Robotics (ALGOSENSORS’14), Wroclaw, Poland, 2014.
- IEEE International Conference on Computing, Networking, and Communications (ICNC’13), San Diego, USA, 2013.
- IEEE ICC, Budapest, Hungary, 2013.
- IEEE GLOBECOM, Anaheim, USA, 2012.
- IEEE International Conference on Computing, Networking, and Communications (ICNC’12), Honolulu, USA, 2012.
- International Conference on Security and Cryptography (SECRYPT’12), Rome, Italy, 2012.
- IEEE International Workshop on Data Security and Privacy in Wireless Networks (D-SPAN’12), San Francisco, USA, 2012.
- ACM Conference on Wireless Network Security (WiSec’11), Hamburg, Germany, 2011.
- International Conference on Cryptography and Network Security (CANS’11), Sanya, China, 2011.
- IEEE ICC, Kyoto, Japan, 2011.
- IEEE GLOBECOM, Houston, USA, 2011.
- International ICST Conference on Security and Privacy in Communication Networks (SecureComm’11), London, UK, 2011.
- IEEE International Workshop on Data Security and Privacy in Wireless Networks (D-SPAN’11), Washington DC, USA, 2011.
- ACM Conference on Wireless Network Security (WiSec’10), New Jersey, USA, 2010.

- International Conference on Computer Communications and Networks (ICCCN'10), Zurich, Switzerland, 2010.
- IEEE GLOBECOM, Miami, USA, 2010.
- IEEE ICC, Cape Town, South Africa, 2010.
- IEEE International Workshop on Data Security and Privacy in Wireless Networks (D-SPAN'10), Washington DC, USA, 2010.
- IEEE INFOCOM, Rio De Janeiro, Brasil, 2009.
- International Conference on Computer Communications and Networks (ICCCN'09), San Francisco, USA, 2009.
- International ICST Conference on Security and Privacy in Communication Networks (SecureComm'09), Athens, Greece, 2009.
- ACM Conference on Wireless Network Security (WiSec'09), Zurich, Switzerland, 2009.
- International Conference on Multimedia Information Networking (MINES'09), Hubei, China, 2009.
- International Workshop on Autonomous and Spontaneous Security (SeTop'09), St. Malo, France, 2009.
- IEEE International Conference on Wireless and Mobile Computing, Networking, and Communications (WiMob'09), Marrakech, Morocco, 2009.
- IEEE INFOCOM, Phoenix, USA, 2008.
- ACM Conference on Wireless Network Security (WiSec'08), Alexandria, USA, 2008.
- IEEE International Conference on Wireless and Mobile Computing, Networking, and Communications (WiMob'08), Avignon, France, 2008.
- International Conference on Communications and Networking in China (ChinaCom'08), Hangzhou, China, 2008.
- International Conference on Communications and Networking in China (ChinaCom'07), Shanghai, China, 2007.
- European Workshop on Security and Privacy in Ad hoc and Sensor Networks (ESAS), Cambridge, UK, 2007.

Session Chair:

- ACM Conference on Wireless Network Security (WiSec'11), Hamburg, Germany, 2011.
- IEEE ICC, Cape Town, South Africa, 2010.
- IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON'09), Rome, Italy, 2009.
- ACM Conference on Wireless Network Security (WiSec'09), Zurich, Switzerland, 2009.
- International ICST Conference on Security and Privacy in Communication Networks (SecureComm'09), Athens, Greece, 2009.
- IEEE INFOCOM, Anchorage, USA, 2007.
- International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt), Boston, USA, 2007.

Referee

- IEEE/ACM Transactions on Networking (TNET).
- IEEE Transactions on Mobile Computing (TMC).
- IEEE Transactions on Information Theory (TIT).
- IEEE Transactions on Dependable and Secure Computing (TDSC).
- IEEE Transactions on Wireless Communications (TWC).
- IEEE Journal on Selected Areas in Communications (JSAC).
- IEEE Transactions on Signal Processing (TSP).
- IEEE Transactions on Information Forensics and Security (TIFS).
- IEEE Transactions on Vehicular Technology (TVT).
- IEEE Transactions on Computers (TC).
- IEEE Communication Letters (COMML).
- IEEE Wireless Communications Magazine (WCM).
- Proceedings of the IEEE (PIEEE).
- ACM Transactions on Sensor Networks (TOSN).
- ACM Wireless Networks (WCN).

- ACM Transactions on Information and System Security (TISSEC).
- Mobile Computing and Communications Review (MC2R).
- Elsevier Computer Networks (COMNET).
- Elsevier Computer Communications (COMCOM).
- Elsevier Ad Hoc Networks (ADHOC).
- Wireless Personal Communications (WPC).
- Arabian Journal for Science and Engineering (AJSE).
- 31st IEEE International Conference on Computer Communications (INFOCOM), 2012.
- IEEE Aerospace Conference, 2011.
- 5th International Conference on Mathematical Methods, Models, and Architectures for Computer Network Security (MMM-ACNS), 2010.
- 50th Annual IEEE Symposium on Foundations of Computer Science (FOCS), 2009.

Proposal Review Panels

- National Science Foundation (NSF)
Computer and Information Science and Engineering (CISE)
December 2016
- National Science Foundation (NSF)
Computer and Information Science and Engineering (CISE)
February 2016
- National Science Foundation (NSF)
Computer and Information Science and Engineering (CISE)
May 2012
- Global Environment for Network Innovations (GENI) Project Office
April 2009
- National Science Foundation (NSF)
Computer and Information Science and Engineering (CISE)
December 2009
- National Science Foundation (NSF)
Computer and Information Science and Engineering (CISE)
November 2009

DEPARTMENT, COLLEGE, AND UNIVERSITY SERVICE

- Member, ECE Executive Committee, 2016 – present.
- Member, Peer Review Committee, 2015 – present.
- Member, ECE Committee on Committees, 2012 – 2015.
- Member, ECE Graduate Studies Committee, 2012 – 2014.
- Member, ECE Graduate Student Recruitment and Award Committee, 2008 – 2010, 2011 – 2013.
- Member, ECE Undergraduate Studies Committee, 2010 – 2011.
- Member, Computer Policy Committee, 2010 – 2011.

SUPERVISED POSTDOCS, DISSERTATIONS, AND THESIS

Supervised Postdoctoral Researchers

- Joe Fowler, co-advised with Stephen Kobourov (2011 – 2015).
- Thienne Johnson, co-advised with Stephen Kobourov (2011 – 2015).
- Paolo Simonetto, co-advised with Stephen Kobourov (2013 – 2015).

Supervised PhD Dissertations

- [1] Yan Zhang, Ph.D. in Aug. 2015.
Dissertation title: Secure and Spectrally-Efficient Channel Access in Multi-channel Wireless Networks.
- [2] Alejandro Proaño, Ph.D. in Aug. 2015.
Dissertation title: Privacy of Contextual Information in Wireless Sensor Networks.
- [3] Sisi Liu, Ph.D. in Dec. 2011
Dissertation title: Securing Wireless Broadcast Communication Against Internal Attacks (co-advised with Prof. Marwan Krunz).

Supervised MS Theses

- [1] Carlos Acedo, M.S., in Oct 2015.
Thesis title: Evolution of the Internet Topology from a Regional Perspective.
- [2] Bocan Hu, M.S., in Aug. 2015.
Thesis title: Physical Layer Voting For Secure And Fast Cooperation.

- [3] Swetha Shivaramaiah, in Jun. 2015.
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- [4] Swathi Chandrashekar, M.S. in Mar. 2012.
Thesis title: Primary User Authentication Methods for Mobile Cognitive Radio Networks.
- [5] Qin Zhang, M.S. in Dec. 2011.
Thesis title: Privacy-preserving Communication Protocols for Authenticated Location-based Services in Mobile Networks.
- [6] Yu Zhang, M.S. in Sep. 2011.
Thesis title: Detection and Isolation of Packet Droppers in Wireless Ad-hoc Networks.
- [7] Alejandro Proaño, M.S. in Nov. 2010.
Thesis title: Selective Jamming Attacks in Wireless Networks.
- [8] William Jr. Kozma, M.S. in Apr. 2009.
Thesis title: Resource-efficient Misbehavior Identification in Wireless Ad Hoc Networks,.