### Brent Lagesse, Ph.D.

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### **Curriculum Vitae**

#### Summary

I am an associate professor at the University of Washington Bothell, a Primarily Undergraduate Institution. My research focus is at the intersection of security, machine learning, and mobile systems. My teaching focuses on undergraduate and graduate computer security and networking. My work has been supported by over \$1.5 million in external funding and resulted in over 30 peer-reviewed publications.

#### Education

University of Texas at Arlington Degree: Ph.D., Computer Science Thesis Topic: Autonomic Trust Management in Dynamic Advisors: Matthew Wright and Mohan Kumar	<b>Aug 2006 – Aug 2009</b> Systems
University of Texas at Arlington Degree: M.S., Computer Science Specialization: Networking Thesis Topic: Dynamic Formation of Software Agent Con Advisor: Mohan Kumar	Aug 2004 – May 2006
Illinois Institute of Technology Degree: B.S., Computer Engineering with Honors	Aug 2000 – May 2004
University of Washington Bothell Associate Professor Assistant Professor Performed research teaching and service focused on securi	Sept 2013 – Present Sept 2018 – Present Sept 2013 – Sept 2018 tv in emerging
	University of Texas at Arlington Degree: Ph.D., Computer Science Thesis Topic: Autonomic Trust Management in Dynamic Advisors: Matthew Wright and Mohan Kumar University of Texas at Arlington Degree: M.S., Computer Science Specialization: Networking Thesis Topic: Dynamic Formation of Software Agent Con Advisor: Mohan Kumar Illinois Institute of Technology Degree: B.S., Computer Engineering with Honors Appointments University of Washington Bothell Associate Professor Assistant Professor Performed research, teaching, and service focused on securi

environments. Current research projects include adversarial machine learning, secure crowdsensing, privacy in cyber-physical systems, distributed trust in pervasive systems, and security education and workforce development. Chaired 31 graduate capstone/thesis projects and 37 undergraduate capstones.

University of Bamberg
 Johann-von-Spix International Guest Professorship

October 2019 - February 2020

Duties to include teaching a graduate seminar course on "Privacy and Security in Pervasive Computing", guest lectures, and co-supervision of the Living Lab Bamberg Project.

• University of Cambridge

Fulbright Cyber Security Scholar

Research in security and privacy of crowd sensing systems. Research focus included identifying strategically injected malicious data from users infected with malware, securing incentive distribution in crowd sensing, and privacy of crowd sensed data sets.

University of Maryland University College Sept 2010 – May 2011
 Adjunct Professor

Taught distance-learning courses in security in the Graduate School of Management and Technology.

University of Texas at Arlington
 Research Assistant

for both non-majors and computer science majors.

Research for Pervasively Secure Infrastructures and Collaborative Virtual Observation projects. Research involved using game-theoretic approaches to securely and reliably access resources and dynamically compose services in hostile, mobile, and open environments.

University of Texas at Arlington
 Part-Time Instructor
 Taught Introduction to C in the Computer Science Engineering department 4 times

Employment (Non-Academic)

#### • Shardus

Cybersecurity Consultant

Development of secure development and operations best practices for blockchain technology. Consulting on security concerns by developers. Static and Dynamic analysis of codebase and systems for security vulnerabilities.

#### • BBN Technologies

Research Scientist

Performed experiments in dynamic and static analysis techniques to instrument binary code. Led research team in Internet voting. Performed research in Internet situational awareness. Conducted research in model checking for security properties. Conducted additional classified research not mentioned above.

Oak Ridge National Laboratory

#### Cyber Security Research Scientist

Research focused on providing secure and reliable access to critical information on systems with intermittent connectivity and untrusted nodes. Research topics

3/28/2024

# Sept 2009 – May 2011

June 2011 – May 2013

#### 2/10

## Jan 2022 – Present

### June 2008 – Aug 2009

April 2018 – Sept 2018

included Advanced Metering Infrastructure, privacy for wireless medical systems, key distribution, and forensics in cyber-physical systems.

Lawrence Livermore National Laboratory May 2006 – May 2009
 *Student Scholar*

Research and development for the ACATS and ACATS3D simulation, control, and visualization projects. Researched and developed methods of representing uncertain information in 3D environments. Using Qt, DI-Guy, AI-Implant, and Delta3D to create interaction between the user and simulation information.

Lockheed Martin Missiles & Fire Control June 2005 – May 2006
 Engineering Intern
 Software development for the TOPSCENE project including the TS48 3D

Software development for the TOPSCENE project including the TS48 3D Visualization System and TOPCOP Control System. Integrated DIS, CIGI, and HLA simulation feeds into a 3D environment. Used OneSAF and JSAF to validate visualization functionality.

### **Publications**

#### • Refereed Publications

- Anthony Bustamante, Sarah Asad, Daniela Nicklas and Brent Lagesse. A Dual-Model Anomaly Detection Algorithm for non-linear stream data in Smart City Environments, International Workshop on Security and Reliability in IoT Systems (SecRIot), 2024.
- 2. Gautam Kumar and Brent Lagesse. Thimblerig: A Game-Theoretic, Adaptive, Risklimiting Security System for Cloud Systems, GameNetSec, 2024.
- 3. Sarah Asad, Breanna Powell, Christopher Long, Daniela Nicklas, and Brent Lagesse. Where Am I?: Unraveling Challenges in Smart City Data Cleaning to Establish a Ground Truth Framework, IEEE TRUSTSENSE, 2024. Best Paper Finalist.
- Christopher Perdriau, Vidushi Ojha, Kaitlynn T Gray, Brent Lagesse, Colleen M Lewis. *The Diversity-Hire Narrative in CS: Sources, Impacts, and Responses*, Technical Symposium on Computer Science Education (SIGCSE), 2024. Ranked as an A conference by CORE<sup>1</sup>, typically 30% acceptance rate.
- Jeffy Jahfar Poozhithara, Hazeline Asuncion, and Brent Lagesse. Keyword Extraction From Specification Documents for Planning Security Mechanisms, IEEE/ACM International Conference on Software Engineering (ICSE), 2023. 26% Acceptance Rate. Ranked the #1 Software Systems Conference by Google Scholar and A\* by CORE.
- Vidushi Ojha, Christopher Perdriau, Brent Lagesse and Colleen M Lewis. Computing Specializations: Perceptions of AI and Cybersecurity Among CS Students, Technical Symposium on Computer Science Education (SIGCSE), 2023.
   Ranked as an A conference by CORE, typically 30% acceptance rate.
- Jeffy Jahfar Poozhithara, Hazeline Asuncion and Brent Lagesse. Towards Lightweight Detection of Design Patterns in Source Code, International Conference on Software Engineering and Knowledge Engineering (SEKE), 2022. 39% acceptance rate, B rating by CORE

<sup>&</sup>lt;sup>1</sup> <u>https://drive.google.com/file/d/1q21YeVIEDYyjKJ9WBPXTgbRH\_reCnV12/edit</u>

- Brent Lagesse, Shuoqi Wang, Timothy V. Larson, and Amy A. Kim. Performing Indoor PM<sub>2.5</sub> Prediction with Low-cost Data and Machine Learning. Facilities Journal, 2022. Impact Factor 2.96
- Brent Lagesse, Gabriel Nguyen, Utsav Goswami, and Kevin Wu. You Had to Be There: Private Video Sharing for Mobile Phones using Fully Homomorphic Encryption. IEEE Security, Privacy, and Trust in the Internet of Things (SPT-IoT), 2021.
- Brent Lagesse, Shuoqi Wang, Timothy V. Larson, and Amy A. Kim. Predicting PM<sub>2.5</sub> in well-mixed indoor air for a large office building using regression and artificial neural network models. Environmental Science & Technology Journal, 2020. Impact Factor 11.36, Ranked #2 by Google Scholar in Environmental Sciences
- Kevin Wu and Brent Lagesse. Detecting Hidden Webcams with Delay-Tolerant Similarity of Simultaneous Observation. Pervasive and Mobile Computing, 2020. Impact Factor 4.425
- 12. Utsav Goswami, Kevin Wang, Gabriel Nguyen, **Brent Lagesse.** Privacy-Preserving Mobile Video Sharing using Fully Homomorphic Encryption. IEEE Pervasive Computing and Communications (PERCOM Demo), 2020.
- 13. Nicholas Handaja and Brent Lagesse. CAPP: A Context-Aware Proof of Presence for Crowdsensing Incentives. Workshop on Context and Activity Modeling and Recognition (COMOREA), 2020.
- 14. Marc Dupuis, Camelia Bejan, Matt Bishop, Scott David, and **Brent Lagesse**. *Design Patterns for Compensating Controls for Securing Financial Sessions*. International Workshop on Security Measurements of Cyber Networks (SMCN), 2019.
- Kevin Wu and Brent Lagesse. Do You See What I See? Detecting Hidden Streaming Cameras through Similarity of Simultaneous Observation. IEEE Pervasive Computing and Communications (PERCOM), 2019. 16.6% acceptance rate (7.7% acceptance rate for papers requiring no revisions), Ranked A\* by CORE.
- 16. Abirami Narayanan, Yang Peng, and **Brent Lagesse**. *iService: A Cloud-based Scheduling Service for Efficient Usage of IoT Resources*. IEEE Pervasive Living Spaces (PerLS), 2019.
- 17. Brent Lagesse, Kevin Wu, Jaynie Shorb, and Zealous Zhu. *Detecting Spies in IoT Systems using Cyber-Physical Correlation*. IEEE Workshop on Mobile and Pervasive Internet of Things (PerIOT), 2018.
- Brent Lagesse, Kevin Wu, Jaynie Shorb, and Zealous Zhu. Automated Hidden Sensor Detection in Sensor-Rich Spaces. IEEE Pervasive Computing and Communications Demo Session (PERCOM Demo), 2018.
- 19. Ajay Palleri Kesavan, Neil Prakasam, Ambika Hegde, and **Brent Lagesse**. *Enabling Crowd Sensing for Non-Experts*. IEEE Pervasive Computing and Communications Demo Session (PERCOM Demo), 2018.
- 20. Aboubakr Benabbas, Golnaz Elmamooz, **Brent Lagesse**, Daniela Nicklas, and Ute Schmid. *Living Lab Bamberg: An infrastructure to explore smart city research challenges in the wild*. Künstliche Intelligenz, 2017.
- 21. Cody Burkard and **Brent Lagesse**. *Analysis of Causative attacks against SVMs Learning from Data Streams*. International Workshop on Security and Privacy Analytics (IWSPA), 2017. **29% acceptance rate**.
- 22. Ruth Ogunnaike and Brent Lagesse. *Toward Consumer-Friendly Security in Smart Environments.* IEEE Workshop on Security, Privacy, and Trust in the Internet of Things (SPT-IOT), 2017.

- 23. Gautam Kumar and **Brent Lagesse**. *Limited Use Cryptographic Tokens in Securing Ephemeral Cloud Servers*. International Conference on Information Systems Security and Privacy (ICISSP), 2017.
- 24. Brent Lagesse, Cody Burkard, and Julio Perez. Securing Pervasive Systems Against Adversarial Machine Learning. IEEE Pervasive Computing and Communications Conference Work in Progress (PERCOM WIP), 2016.
- 25. Steve Morgan and Brent Lagesse. *Dynamically Generated Virtual Systems for Cyber Security Education*. International Conference on Cloud Security and Management (ICCSM), 2015.
- 26. Brent Lagesse. *Analytical Evaluation of P2P Reputation Mechanisms*. International Journal of Communication Networks and Distributed Systems, 2012.
- 27. Nathanael Paul, **Brent Lagesse**. *Mitigating Solutions in Insulin Pump System Security*. Journal of Diabetes Science and Technology, 5(2):A128. March 2011.
- 28. James Horey and **Brent Lagesse**. Latency Minimizing Tasking for Information Processing Systems. International Workshop on Knowledge Discovery Using Cloud and Distributed Computing Platforms, 2011.
- 29. Craig Shue and **Brent Lagesse**. *Embracing the Cloud for Better Cyber Security*. Middleware Support for Pervasive Computing Workshop (PerWare), 2011.
- 30. Brent Lagesse. *Privacy Challenges for Wireless Medical Devices*. USENIX Workshop on Health, Security, and Privacy, 2010.
- 31. Brent Lagesse, Mohan Kumar, Mihai Lazarescu, Svetha Venkatesh. *Augmenting Trust Mechanisms with Social Networks*. ACM Cyber Security and Information Intelligence Workshop (CSIIRW), 2010.
- 32. Brent Lagesse, Mohan Kumar, Matthew Wright. ReSCo: A Middleware Component for Reliable Service Composition in Pervasive Systems. Middleware Support for Pervasive Computing Workshop (PerWare), 2010.
- 33. Brent Lagesse, Mohan Kumar, Justin Mazzola Paluska, Matthew Wright. DTT: A Distributed Trust Toolkit for Pervasive Systems. IEEE Pervasive Computing and Communications Conference (PERCOM), 2009. 13.1% acceptance rate.
- 34. Brent Lagesse. *Trust and Security in Dynamic Systems*. IEEE Pervasive Computing and Communications Conference, PhD Forum, 2009.
- 35. Brent Lagesse, Mohan Kumar, Matthew Wright. AREX: An Adaptive System for Secure Resource Access in Mobile P2P Systems. IEEE Peer to Peer Computing Conference (P2P), 2008. 20.9% acceptance rate.
- 36. Brent Lagesse, Mohan Kumar. A Novel Utility and Game-Theoretic Based Model for Mobile P2P Systems. IEEE Mobile Peer to Peer Workshop (MP2P), 2008.
- 37. Brent Lagesse, Mohan Kumar. UBCA: Utility-Based Clustering Architecture for Peer-to-Peer Systems. International Conference on Distributed Computing Systems: Workshop on Mobile and Distributed Computing (MDC), 2007.
- 38. Swaroop Kalasapur, Kumarvel Senthivel, **Brent Lagesse**, Mohan Kumar. *Just-in-time Service Composition in Pervasive Environments*, IEEE Pervasive Computing and Communications Conference (PERCOM Demo), 2006.
- 39. Brent Lagesse. A Game-Theoretical Model for Task Assignment in Project Management. IEEE International Conference on Management of Innovation and Technology (ICMIT), 2006.
- Invited Papers

- 1. Eleonora Borgia, Danielo G. Gomes, **Brent Lagesse**, Rodger Lea, Daniele Puccinelli. *Internet of Things: Research challenges and Solutions*. Computer Communications Special Issue on the Internet of Things, 2016.
- 2. Brent Lagesse. *Challenges in Securing the Interface Between the Cloud and Mobile Systems.* Pervasive Communities and Service Clouds, 2011.

#### • Technical Reports

- Joseph S. Carrier, Julia R. Torvi, Erin Jenson, Chloe Jones, Binnu Gangadharan, Elisabeth A. Geyer, Luke M. Rice, Brent Lagesse, Georjana Barnes, Matthew P. Miller. Stimulating microtubule growth is not the essential function of the microtubule polymerase Stu2. bioRxiv 2022.09.09.507218, 2022.
- 2. Jeffrey Murray Jr, Afra Mashhadi, **Brent Lagesse**, Michael Stiber. *Privacy Preserving Techniques Applied to CPNI Data: Analysis and Recommendations*, arXiv:2101.09834, 2021.
- 3. Adedayo Odesile and **Brent Lagesse**. *TrustSense: An Energy Efficient Trust Scheme for Clustered Wireless Sensor Networks*, ArXiv:2011.10017, 2020.
- 4. Jia Wang and **Brent Lagesse**. *KeyGuard: Using Selective Encryption to Mitigate Keylogging in Third-Party IME*, ArXiv:2011.10012, 2020.
- 5. Jeffy Jahfar Poozhithara, Hazeline U. Asuncion, and **Brent Lagesse**. *Automated Query Generation for Design Pattern Mining in Source Code*, ArXiv:2007.13025, 2020.
- 6. Cody Burkard and **Brent Lagesse**. Can Intelligent Hyperparameter Selection Improve Resistance to Adversarial Examples? ArXiv:1902.05586, 2019.

#### • Poster Sessions

- 1. **Brent Lagesse**. *Dynamic Virtual Laboratories*. Secure and Trustworthy Computing PI Workshop, 2015.
- 2. Brent Lagesse, Matthew Wright, Mohan Kumar. Utilizing Resources in Hostile Environments. DIMACS/DyDAn Workshop: Mathematical & Computational Methods for Information Security, 2007.

#### • Patents and Invention Disclosures

1. Erik Ferragut, Robert Abercrombie, **Brent Lagesse**, Frederick Sheldon, Craig Shue, Chris Rathgeb, Louis Wilder. *Ontology-Based Probability Modeling for Distributed Real-Time Anomaly Detection*. DOE-S No. S-115,393, 2009.

#### • Invited Talks

- 1. *Here Be Dragons: Security and Privacy in Uncharted Territories.* Pacific Northwest National Laboratory (PNNL), January 2019.
- 2. Hidden Camera Detection Using Cyber-Physical Correlation. Nokia Bell Labs, July 2018.
- 3. *Hidden Camera Detection Using Cyber-Physical Correlation*. Cyber Physical Systems Seminars, University of Oxford, July 2018.
- 4. Detecting Spies in Sensor-Rich Environments using Cyber-Physical Correlation. Computer Laboratory Security Seminar, University of Cambridge, May 2018
- 5. Detecting Spies in Sensor-Rich Environments using Cyber-Physical Correlation. CS/CE/Feinberg Seminar, Northwestern University, April 2018
- 6. *Current and Emerging Trends in Computer Security*. Washington Defense Trial Lawyers Annual Insurance Law Update, April 2016.

- 7. On-Demand Generation of Virtual Laboratories for Cyber Security Education. Research-In-Progress Speaker Series. University of Washington Bothell, May 2015.
- 8. *Careers in Cyber Security*. CSS Speaker Series. University of Washington Bothell, November 2014.
- 9. Distributed Trust in Pervasive Systems. PLSE Research Seminar. University of Washington, February 2014.
- 10. Security in Emerging Environments. CSS Speaker Series. University of Washington Bothell, February 2014.
- 11. Challenges in Securing Pervasive Systems. ECE Research Seminar. Illinois Institute of Technology, November 2010.

#### • Open Source Software Products

- 12. <u>https://github.com/BrentLagesse/GuideDonorScheduler</u>. A system to automate the creation of CRISPR/CAS9 mutation guides.
- 13. <u>https://github.com/BrentLagesse/YeastAnalysisTool</u>. A tool to automate analysis of images of yeast cells undergoing mitosis to study the impacts of a variety of properties on chromosome segregation.
- 14. <u>https://github.com/SecurityInEmergingEnvironments/IoTScanner</u>. An SDNbased system for automatically detecting insecure IoT devices and mitigating the risk associated with them.
- 15. <u>https://github.com/SecurityInEmergingEnvironments/FortifyML</u>. A recommender system to help ML Engineers without security expertise defend their ML-based systems while maintaining QoS requirements.
- 16. <u>https://github.com/SecurityInEmergingEnvironments/EmulatedAE</u>. An implementation of Emulated Autoencoder, a preprocessor for rapidly defeating some evasion attacks on ML systems.
- 17. <u>https://github.com/SecurityInEmergingEnvironments/MLSF</u>. A testing framework for ML Security mechanisms.

#### **Research Funding**

- External Total: \$1,577,238
  - 1. National Security Agency (NSA). GenCyber Capacity Building: Curriculum Development for Non-Profit Programs Serving Historically Under-Represented Individuals in Cybersecurity, Co-PI, \$95,886 (responsible for **\$47,943**).
  - National Science Foundation (NSF). Artificial Intelligence-Enhanced Cybersecurity: Workforce Needs and Barriers to Learning, PI, \$299,998 (responsible for \$131,329), 4/2021.
  - 3. T-Mobile. *Toward Secure Machine Learning as a Risk-Managed Engineering Field*, PI, **\$54,983**, 3/2021.
  - 4. T-Mobile. Securely anonymizing mobile phone data for ML External Use, PI, **\$87,327**, 7/2020.
  - 5. University of Bamberg. *Johann-von-Spix International Guest Professorship*, PI, **\$23,266**, 10/2019.
  - 6. National Science Foundation (NSF). Secure Crowdsensing for Improving Smart City Applications. PI, **\$299,030**, 03/2019.

- 7. National Science Foundation (NSF). Supplemental Funding for RAPID: Well and Profitable during Pacific Northwest Fires: modeling I-O air pollution measured by fine and ultra-fine particulate matters, Senior Personnel responsible for \$6,869, 09/2018.
- 8. Department of Homeland Security (DHS). Design Patterns and Compensating Controls for Securing Financial Sessions, Senior Personnel, \$99,000 (responsible for **\$11,155**), 06/2018
- 9. Fulbright Commission. Cybersecurity Fulbright Scholar, PI, **\$14,000**, 04/2018.
- 10. T-Mobile. Integrated Business Internships for Cyber Security Education, Consultant, **\$4,000**, 2/2017
- 11. National Aeronautics and Space Administration (NASA). Data Poisoning in Open Machine Learning Systems, PI, **\$5000**, 5/2016
- 12. National Security Agency (NSA). Active Security Against Adversarial Machine *Learning*, PI, **\$292,921**, 9/2015.
- 13. National Aeronautics and Space Administration (NASA). Secure Machine Learning, PI, **\$1000**, 5/2015.
- 14. National Aeronautics and Space Administration (NASA). Mobile Application *Permissions*, PI, **\$1000**, 5/2015.
- 15. National Science Foundation (NSF). Enhancing Cybersecurity Education for Native Students Using Virtual Laboratories, PI, \$292,958, 9/2014
- Internal Total: \$141,464 ٠
  - 1. UWB CSS, Secure Data Analysis in Crowd Sensing Systems, PI, \$57,900, 6/2017
  - 2. UWB CSS, Defending Against Adversarial Machine Learning in Dynamic Systems, PI, **\$57,900**, 6/2016
  - 3. UWB CSS, Internet Scale Tracking of Email Transactions, PI, \$4,300, 4/2015
  - 4. UWB CSS, Host Based Detection of Malicious Cell Phone Towers, PI, \$5,515, 1/2014
  - 5. BBN, DARPA Cyber Fast Track (Classified), PI, \$4,961, 9/2012
  - 6. BBN, Internet Voting, PI, **\$10,888**, 5/2012

#### Clearances

- **Department of Defense Top Secret**
- Department of Energy 'Q'

#### **Teaching Experiences**

University of Washington Bothell Sept 2013 – Present • **Position:** Assistant Professor, Associate Professor Classes Taught: Cryptography, Malware Reverse Engineering, Secure Software Development, Security and Privacy in Emerging Environments, Network Design, Secure Systems, Adversarial Machine Learning, Data Structures and Algorithms, Discrete Mathematics, AI and Cybersecurity University of Maryland University College Sept 2010 - May 2011 • **Position:** Adjunct Professor **Responsibilities:** Teach distance-learning graduate courses in cyber security. **Classes Taught:** Cyberspace and Cybersecurity (2 semesters)

Oct 2008 - May 2011

June 2011 – June 2016

- Trinity River Mission Jan 2008 May 2009
   Position: Volunteer
   Responsibilities: Create and teach classes designed to promote interest and education in computer science amongst underprivileged 6-12 graders
   Classes Taught: Programming with Alice, Introduction to Java, Introduction to PHP
- University of Texas at Arlington Position: Part-time Instructor Responsibilities: Organize and teach courses Classes Taught: Introduction to Programming in C
- University of Texas at Arlington Position: Teaching Assistant
   Responsibilities: Instruct, write, and grade labs
   Classes Taught: Introduction to Programming in C, Introduction to Engineering, Computer Literacy

#### Select Honors and Awards

- Johann-von-Spix International Guest Professor, 2019-2020
- Fulbright Cyber Security Award, 2017-2018
- <u>UW Bothell Chancellor's Distinguished Undergraduate Research and Creative</u> <u>Practice Mentor Award</u>, 2016
- John S. Schuchman Outstanding Doctoral Student Award, 2007-2008
- University Scholar (top 1% of UT Arlington), 2006-2007
- <u>Graduate Fellowship for STEM Diversity</u> (Formerly National Physical Science Consortium Fellow), 2006-2008
- <u>Verizon Outstanding Master's Thesis</u>, 2005-2006
- <u>Camras/NEXT Full Scholarship</u> for study at Illinois Institute of Technology, 2000

### Service Activities

- Internal
  - 1. **Chaired Department Committees:** Tenure Track Faculty Search Committee, Microcredits Committee, Cybersecurity Engineering Oversight and 5-Year Review Committee
  - 2. Department Committees: Undergraduate Curriculum Committee, Graduate Curriculum Committee, Infrastructure Committee, Public Communications, Merit Review for Part-time Faculty, Undergraduate Admissions Committee, Graduate Admissions Committee, Part-time Hiring Committee, CIAC/Cybersecurity Committee, Petition Committee
  - 3. Organizational Advisor: Gray Hats Hacking Club
  - 4. **Campus and University:** CSS Representative for STEM Faculty Council, Faculty Tri-Campus Policy Committee, Teaching Evaluation Task Force, Program Review Subcommittee, UWB Founders Fellow Reviewer, Chancellor's Distinguished Undergraduate Research and Creative Practice Reviewer

- External
  - 1. **Program Chair:** ACM CCS Workshop on Insider Threats, International Workshop on Advances in Pervasive Computing, Mini-track on Cloud Computing Security and Emerging Environments at ICCSM
  - 2. **TPC Vice-Chair:** IEEE Pervasive Computing and Communications
  - 3. **Guest Editor:** ComCom SI on Internet of Things, Elsevier Pervasive and Mobile Computing SI on Pervasive Computing
  - 4. **Publicity Chair:** IEEE Pervasive Computing and Communications
  - 5. **Demo/Poster Chair:** IEEE Pervasive Computing and Communications, IEEE Internet of People
  - 6. **Research Area Chair:** MOBILITY (Context-aware, media, and pervasive computing)
  - 7. **Technical Program Committees:** Digital Forensics Research Conference, IEEE Pervasive Computing and Communications Conference, IEEE International Conference on Sensing, Communication, and Networking, IEEE Middleware Support for Pervasive Computing Workshop, IEEE Hot Topics in Pervasive Computing, IEEE/IFIP Embedded and Ubiquitous Computing Conference (Mobile and Context-aware Computing & Middleware for Embedded and Ubiquitous Computing tracks), MOBILITY, MultiStream, IEEE/FTRA Multimedia and Ubiquitous Engineering, PerMoby. ICDCN, SUSTAINIT