## Lin Deng

CONTACT Information

Phone: (410) 704-2894

E-Mail: ldeng@towson.edu

Web: http://wp.towson.edu/ldeng

RESEARCH INTERESTS I am interested in Software Engineering, Software Testing, Cyber Security, Machine Learning, Mutation Analysis, and Cyber Forensics.

Professional Experience

Associate Professor

Towson University, Maryland

August, 2023 - Now

Assistant Professor

Towson University, Maryland

August, 2017 - August, 2023

Software Engineer Intern

United States Department of Agriculture

May, 2015 - August, 2015

Design and implementation of federal government big data systems; research in the model for management and validation of federal government big data analytical systems

Computer Engineer

State Intellectual Property Office of China

May, 2006 - August, 2009

Design, implementation, and maintenance of information systems

EDUCATION

### Ph.D. in Information Technology

George Mason University, Fairfax, Virginia

Dissertation: "Testing Android Apps with Mutation Analysis"

Advisor: Dr. Jeff Offutt

### M.S. in Computer and Information Science

Gannon University, Erie, Pennsylvania

Thesis: "A Resource-based Approach for Eliciting Security Requirements for Web Applications"

Advisor: Dr. Weifeng Xu

### **B.S.** in Computer Science

Renmin University of China, Beijing, China

PUBLICATIONS
(AUTHORS WITH
A \* ARE STUDENTS
MENTORED BY
ME.)

- Honghe Zhou\*, Phuong Dinh Nguyen\*, Lin Deng, Weifeng Xu, Josh Dehlinger and Suranjan Chakraborty, Reconstructing Android User Behavior through Timestamped State Models, 47<sup>th</sup>
   *Annual IEEE Computer Software and Applications Conference (COMPSAC 2023)*, June 2023, Turin, Italy.
- Jonathan Li\*, Steven Pugh\*, Honghe Zhou\*, Lin Deng, Josh Dehlinger and Suranjan Chakraborty, Experimental Evaluation of Adversarial Attacks Against Natural Language Machine Learning Models, 21<sup>st</sup> IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2023), May 2023, Orlando, FL.
- Eric Xu\*, Alex Xu\*, Danny Ferreira, and **Lin Deng**, A Hands-on Digital Forensic Lab to Investigate Morris Worm Attack, 54<sup>th</sup> ACM Technical Symposium on Computing Science Education (SIGCSE 2023), March 2023, Toronto, Canada.
- Weifeng Xu, Lin Deng and Dianxiang Xu, Towards Designing Shared Digital Forensics Instructional Materials, 46<sup>th</sup> Annual IEEE Computer Software and Applications Conference (COMPSAC 2022), June 2022.
- Honghe Zhou\*, **Lin Deng**, Weifeng Xu, Wei Yu, Josh Dehlinger and Suranjan Chakraborty, Towards Internet of Things (IoT) Forensics Analysis on Intelligent Robot Vacuum Systems, 20<sup>th</sup>

- IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2022), May 2022, Las Vegas, NV.
- Lin Deng, Bingyang Wei, Jin Guo, Matt Benke, Tyler Howard\*, Matt Krause\* and Aman Patel\*, Securing Sensitive Data in Java Virtual Machines, 20<sup>th</sup> IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2022), May 2022, Las Vegas, NV.
- Bingyang Wei, **Lin Deng** and Yi Wang, A Practical Style Guide and Templates Repository for Writing Effective Use Cases, 20<sup>th</sup> IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2022), May 2022, Las Vegas, NV.
- Suranjan Chakraborty, **Lin Deng**, and Josh Dehlinger, Towards Authentic Undergraduate Research Experiences in Software Engineering and Machine Learning, 3<sup>rd</sup> International Workshop on Education through Advanced Software Engineering and Artificial Intelligence (EASEAI 2021), August 2021, Athens, Greece.
- Garrett Partenza\*, Trevor Amburgey\*, **Lin Deng**, Josh Dehlinger and Suranjan Chakraborty, Automatic Identification of Vulnerable Code: Investigations with an AST-Based Neural Network, 4<sup>th</sup> IEEE International Workshop on Advances in Artificial Intelligence & Machine Learning (AIML 2021): Applications, Challenges & Concerns, July 2021, Spain.
- Rajesh Kumar Gnanasekaran\*, Suranjan Chakraborty, Josh Dehlinger, and Lin Deng, Using Recurrent Neural Networks for Classification of Natural Language-based Non-functional Requirements, 4<sup>th</sup> International Workshop on Natural Language Processing for Requirements Engineering (NLP4RE 2021), April 2021, Germany.
- Samuel Peacock\*, Lin Deng, Josh Dehlinger, and Suranjan Chakraborty, Automatic Equivalent Mutants Classification Using Abstract Syntax Tree Neural Networks, 16<sup>th</sup> International Workshop on Mutation Analysis (Mutation 2021), April 2021, Porto de Galinhas, Brazil.
- Lin Deng, Josh Dehlinger, and Suranjan Chakraborty, Teaching Software Testing with Free and Open Source Software, 1<sup>st</sup> International Software Testing Education Workshop (TestEd 2020), March 2020, Porto, Portugal.
- Nicholas Saccente\*, Josh Dehlinger, **Lin Deng**, Suranjan Chakraborty, and Yin Xiong\*, Project Achilles: A Prototype Tool for Static Method-Level Vulnerability Detection of Java Source Code Using a Recurrent Neural Network, 1<sup>st</sup> International Workshop on Software Engineering Intelligence (SEI 2019), November 2019, San Diego, CA.
- Wesley Dingman\*, Aviel Cohen\*, Nick Ferrara\*, Adam Lynch\*, Patrick Jasinski\*, Paul E. Black and **Lin Deng**, Defects and Vulnerabilities in Smart Contracts, a Classification using the NIST Bugs Framework, *International Journal of Networked and Distributed Computing*, Volume 7, Issue 3, August 2019, Pages 121-132.
- Patrick Chapman, Dianxiang Xu, Lin Deng, and Yin Xiong\*, Deviant: A Mutation Testing Tool for Solidity Smart Contracts, 2<sup>nd</sup> IEEE International Conference on Blockchain (Blockchain 2019), July 2019, Atlanta, GA.
- Cody Baker\*, Lin Deng, Suranjan Chakraborty and Josh Dehlinger, Automatic Multi-Class Non-Functional Software Requirements Classification Using Neural Networks, 13<sup>th</sup> IEEE International Workshop on Quality Oriented Reuse of Software (QUORS 2019), July 2019, Milwaukee, WI.
- Lin Deng, Jing Tian, Christopher Cornwell, Victoria Phillips, Long Chen\*, and Amro Alsuwaida\*, Towards an Augmented Reality-based Mobile Math Learning Game System (Poster Paper), 21<sup>st</sup> International Conference on Human-Computer Interaction (HCII 2019), July 2019, Orlando, FL.
- Bingyang Wei, Yihao Li, **Lin Deng** and Nicholas Visalli\*, Teaching Distributed Software Architecture By Building an Industrial Level Distributed E-commerce Application, 17<sup>th</sup> IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA)

- 2019), May 2019, Honolulu, HI.
- Nicholas Visalli\*, Lin Deng, Amro Al-Suwaida\*, Zachary Brown\*, Manish Joshi\* and Bingyang Wei, Towards Automated Security Vulnerability and Software Defect Localization, 17<sup>th</sup> IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2019), May 2019, Honolulu, HI.
- Wesley Dingman\*, Aviel Cohen\*, Nick Ferrara\*, Adam Lynch\*, Patrick Jasinski\*, Paul E. Black and Lin Deng, Classification of Smart Contract Bugs Using the NIST Bugs Framework, 17<sup>th</sup> IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2019), May 2019, Honolulu, HI.
- Tim Merino\*, Matt Stillwell\*, Mark Steele\*, Max Coplan\*, Jon Patton\*, Alexander Stoyanov\* and Lin Deng, Expansion of Cyber Attack Data from Unbalanced Datasets using Generative Adversarial Networks, 17<sup>th</sup> IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2019), May 2019, Honolulu, HI.
- Lin Deng and Jeff Offutt, Experimental Evaluation of Redundancy in Android Mutation Testing, International Journal of Software Engineering and Knowledge Engineering, 28, No. 11n12, Pages 1597-1618, 2018.
- Lin Deng and Jeff Offutt, Reducing the Cost of Android Mutation Testing, 30<sup>th</sup> International Conference on Software Engineering and Knowledge Engineering (SEKE 2018), July 2018, San Francisco, CA.
- Lin Deng, Jeff Offutt, and David Samudio, Is Mutation Analysis Effective at Testing Android Apps?, *IEEE International Conference on Software Quality, Reliability and Security (QRS 2017)*, July 2017, Prague, Czech Republic.
- Weifeng Xu, Dianxiang Xu, and **Lin Deng**, Measurement of Source Code Readability Using Word Concreteness and Memory Retention of Variable Names, 41<sup>st</sup> Annual IEEE Computer Software and Applications Conference (COMPSAC 2017), July 2017, Turin, Italy.
- Lin Deng, Jeff Offutt, Paul Ammann, and Nariman Mirzaei, Mutation Operators for Testing Android Apps, *Information and Software Technology*, Vol. 81, January 2017, Pages 154-168.
- Feras Batarseh, Ruixin Yang, and **Lin Deng**, A Comprehensive Model for Management and Validation of Federal Big Data Analytical Systems, in *Big Data Analytics*.
- Deanna Caputo, Shari Pfleeger, Angela Sasse, Paul Ammann, Jeff Offutt, and **Lin Deng**, Barriers to Usable Security? Three Organizational Case Studies, *IEEE Security and Privacy*, Vol. 14, No. 5, Pages 22-32, Sept.-Oct. 2016.
- Upsorn Praphamontripong, Jeff Offutt, Lin Deng, and Jingjing Gu, An Experimental Evaluation of Web Mutation Operators, 11<sup>th</sup> International Workshop on Mutation Analysis (Mutation 2016), April 2016, Chicago, IL.
- Lin Deng, Nariman Mirzaei, Paul Ammann, and Jeff Offutt, Towards Mutation Analysis of Android Apps, 10<sup>th</sup> International Workshop on Mutation Analysis (Mutation 2015), April 2015, Graz, Austria.
- Guoxian Yu, Guoji Zhang, Zili Zhang, Zhiwen Yu, and **Lin Deng**, Semi-supervised Classification Based on Subspace Sparse Representation, *Knowledge and Information Systems*, Vol. 43, No. 1, pp. 81-101, 2015.
- Marcio Delamaro, **Lin Deng**, Nan Li, Vinicius Durelli and Jeff Offutt, Growing a Reduced Set of Mutation Operators, 28<sup>th</sup> Brazilian Symposium on Software Engineering (SBES 2014), September 2014, Macei AL, Brazil.
- Marcio Delamaro, Lin Deng, Nan Li, Vinicius Durelli and Jeff Offutt, Experimental Evaluation of SDL and One-Op Mutation for C, 7<sup>th</sup> IEEE International Conference on Software Testing,

- Verification and Validation (ICST2014), March 2014, Cleveland, OH.
- Bob Kurtz, Paul Ammann, Marcio Delamaro, Jeff Offutt and Lin Deng, Mutant Subsumption Graphs, 9<sup>th</sup> International Workshop on Mutation Analysis (Mutation 2014), March 2014, Cleveland, OH.
- Nan Li, Xin Meng, Jeff Offutt, and Lin Deng, Experience Report: Is Bytecode Instrumentation as Good as Source Code Instrumentation: An Empirical Study With Industrial Tools, 24<sup>th</sup>
   *IEEE International Symposium on Software Reliability Engineering (ISSRE2013)*, November 2013,
   Pasadena, CA.
- Lin Deng, Jeff Offutt, and Nan Li, Empirical Evaluation of the Statement Deletion Mutation Operator, 6<sup>th</sup> IEEE International Conference on Software Testing, Verification and Validation (ICST2013), March 2013, Luxembourg.
- Weifeng Xu, **Lin Deng**, Tao Ding, Detecting Web Security Risks With UML Design Models, 7<sup>th</sup> IASTED International Conference on Communication, Internet, and Information Technology (CIIT 2012), May. 2012, Baltimore, MD.
- Weifeng Xu, **Lin Deng**, and Qing Zheng, A Resource-based Approach to Derive Security Test Cases, 9<sup>th</sup> International Conference on Information Technology: New Generations (ITNG2012), Apr. 2012, Las Vegas, NV.
- Weifeng Xu, **Lin Deng**, Qing Zheng, and Stephen Frezza, Constructing 3D Surface Models for Building Cushion Seats Using Stereo Visions, *IEEE Potentials*, Vol. 31, Issue 2, pp. 31-37, Apr. 2012.
- Lin Deng, Weifeng Xu, Stephen Frezza, A Resource-based Approach to Extend UML Diagrams for Web Applications, *International Conference on Computer Science and Service System (CSSS2011)*, Jul. 2011.
- Weifeng Xu, Lin Deng, and Yunkai Liu, A Resource-based Approach to Formalize Use Case Specification, International Conference on Progress in Informatics and Computing (PIC2010), Dec. 2010.
- (PI) Development of An Interdisciplinary Course to Enhance Students' Supercomputing Education with Multidisciplinary Research Experience, School of Emerging Technology, Towson University. Amount awarded \$20,860. (2022 2024)
- (PI) Authentic Undergraduate Research Experiences in Software Engineering and Machine Learning. General Endowment Funds, Jess & Mildred Fisher College of Science & Mathematics, Towson University. Amount awarded \$19,440. (2021 2023)
- (PI) Supplement Award: Developing a Cloud-based Cyber Investigation Case Simulator for Enhancing Students' Learning Experience at the University of Baltimore and Towson University. U.S. Department of Justice. Amount awarded \$432,767 (Collaborative grant with the University of Baltimore). (2021 2023)
- (PI) Developing a Cloud-based Cyber Investigation Case Simulator for Enhancing Students' Learning Experience at the University of Baltimore and Towson University. U.S. Department of Justice. Amount awarded \$450,000 (Collaborative grant with the University of Baltimore). (2020 2022)
- (PI) Authentic Undergraduate Research Experiences in Machine Learning. General Endowment Funds, Jess & Mildred Fisher College of Science & Mathematics, Towson University. Amount awarded \$18,533. (2019 2021)
- (PI) GCP Research Grant. Google. Awarded \$10,000 credits. (2018)

Grants

- (PI) NVIDIA Research Grant. NVIDIA. Awarded Titan XP GPU Card. (2018)
- (PI) Developing an Augmented Reality and Mobile Game-based Mathematical Learning Approach for 8<sup>th</sup> Grade Students. School of Emerging Technology, Towson University. Amount awarded \$23,575.90. (2018 2020)
- (PI) Achieving Fully Automated Testing for Android Apps Using Artificial Intelligence Techniques. Faculty Development Research Committee Grant. Towson University. Amount awarded \$6,000. (2018 2019)
- (PI) Information Security Research and Education (INSuRE). National Security Agency and National Science Foundation (Subcontract from Purdue University). Amount awarded \$12,000. (2017 2019)
- (CO-PI) Building a Technical and General Education Cybersecurity Modules Curriculum. National Security Agency, Cybersecurity National Action Plan. Amount awarded \$192,127. (2017 2018)

### TEACHING EXPERIENCE

#### Instructor

Towson University:

COSC 412 - Software Engineering

COSC 436 - Object-Oriented Design and Programming

COSC 431 - Research in Software Engineering and Cybersecurity (INSuRE Project)

COSC 490 - Software Project Practicum (INSuRE Project)

COSC 603 / AIT 642 - Software Testing and Maintenance

COSC 745 - Secure Software Engineering

### **Guest Lecturer**

George Mason University:

SWE 645 - Component-based Software Development (Java EE Web Programming)

SWE 642 - Software Engineering for the World Wide Web

SWE 637 - Software Testing

### **Graduate Teaching Assistant**

George Mason University:

SWE 645 - Component-based Software Development (Java EE Web Programming)

SWE 642 - Software Engineering for the World Wide Web

SWE 637 - Software Testing

SWE 619 - Object-Oriented Software Specification and Construction

SWE 437 - Software Testing

CS 332 - Object-Oriented Software Design and Implementation

CS 310 - Data Structure

SWE 205 - Software Usability Analysis and Design

Gannon University:

GCIS 504 - Requirement Engineering

# AWARDS AND FELLOWSHIPS

**Excellence in Teaching Award**, Jess and Mildred Fisher College of Science and Mathematics, Towson University, 2020

Jess and Mildred Fisher Endowed Professor of Computer and Information Sciences, Towson University, 2019 - 2022

Outstanding Graduate Student Award, George Mason University, 2017

Summer Research Fellowship, George Mason University, 2016

First Place of Ph.D. Research Symposium, George Mason University, 2016

Outstanding Graduate Teaching Assistant Award, George Mason University, 2014

University Doctoral Fellowship, George Mason University, 2012

Dean Fellowship, George Mason University, 2011

Academic Excellence Award, Gannon University, 2011

ACADEMIC/ RESEARCH ADVISING

### **Doctoral Thesis Advisor**

Rajesh Kumar Gnanasekaran, Automatic Classification of Non-functional Requirements using Machine Learning (2019 - Now)

Honghe Zhou, Real-world Digital Forensics Case Studies and Simulator (2020 - Now)

Terrence Pugh, Automatic Identification of Equivalent Mutants using Machine Learning (2021 - Now)

### Master Thesis/Project/Independent Study Advisor

Chase Brewer, ScryWarden: Scalable Anomaly Detection through Behavioral Modeling (2020)

Laura Vail, Empirical Study of Software Testing Strategies Using an Industry Project (2020)

Yimeng Gao, Software Program Source Code Recommender System (2020)

Nicholas Visalli, Testing Microservices (2019)

Nicholas Winner, A Computer Vision System for Bowling Alleys (2019)

Yin Xiong, Experimental Evaluation Of Adversarial Machine Learning (2019)

Kristen Wymer, Space Telescope Science Institute Web Application Security and Business Intelligence Branch Unit Testing Project (2019)

Jordan Wren, Mutation Testing Web Application (2019)

Sean Donnelly, Design, Development, and Deployment of Micro-Service Architecture at Scale (2018)

### Undergraduate Students in TU Software Engineering Research Group

Current:

William Freeman, Automatic Detection of Software Vulnerability using Machine Learning Erik Nilson, Adversarial Attacks to Machine Learning Models

Caleb Blomquist, Automatic Detection of Software Vulnerability using Machine Learning Phuong Dinh Nguyen, Digital Forensics

Samuel Peacock, Automatic Detection of Security Vulnerability using Machine Learning

Mariam Adegbuyi, Automatic Detection of Steganography Artifacts Amarachi Enyiazu, Real-world Mobile Forensics Case Studies and Simulator

Prior Students:

Garrett Partenza (Now in the graduate program of the Northeastern University)

Trevor Amburgey (Now at MITRE)

Saraubi Harrison (Now at Amazon)

Mary Martin (Now in the Ph.D. program of the University of Colorado Boulder)

Jon Patton (Now at MITRE)

Deep Patel (Now at NEC Laboratories)

Jon Perry (Now in the Ph.D. program of the University of Amsterdam)

Nicholas Saccente (Now at Parsons)

Alexander Stoyanov (Now at HemaTerra Technologies)

Wesley Dingman (Now at CACI)

Cody Baker

Nick Baker

Martin Pineda

Taylor McLaughlin

Alexander Cochrane

Adam Atkins

Shane Homick

### Research Mentor for High School Students

Eric Xu, (2022 - 2023). Marriott Ridge High School

Jonathan Li, (2022 - 2023), Riverhill High School

Paige Wirt (2021 - 2022), Science and Mathematics Academy, Aberdeen High School Maxwell Cerasoli (2020 - 2021), Science and Mathematics Academy, Aberdeen High School Salman Nasir (2019 - 2020), Science and Mathematics Academy, Aberdeen High School

### Doctoral/Master Thesis and Project Committee Member

Michael Franz, Advisor: Drs. Sidd Kaza and Blair Taylor

Atif Islam, Advisor: Dr. Weixian Liao Christian Yovo, Advisor: Dr. Weixian Liao Lucas Schlegel, Advisor: Dr. Weixian Liao

Helina Oladapo, Advisor: Dr. Joyram Chakraborty

Nam Ha, Advisor: Dr. Nam Nguyen Shreya Patel, Advisor: Dr. Nam Nguyen Boyang Shao, Advisor: Dr. Weixian Liao Joshitha Mandali, Advisor: Dr. Josh Dehlinger Zachary Lance, Advisor: Dr. Charles Dierbach Nick Garcia, Advisor: Dr. Michael McGuire Kelly Dolan, Advisor: Dr. Josh Dehlinger Sasha Pivowar, Advisor: Dr. Josh Dehlinger Curtis Smith, Advisor: Dr. Weixian Liao Manish Lamsal, Advisor: Dr. Subrata Acharya Tapasya Gogulwar, Advisor: Dr. Subrata Acharya Obinna Ewulum, Advisor: Dr. Subrata Acharya Winsum Chang, Advisor: Dr. Subrata Acharya

Kofi Akyeampong, Advisor: Dr. Subrata Acharya Christopher Pence, Advisor: Dr. Subrata Acharya Ajith Keerikkattil, Advisor: Dr. Josh Dehlinger Aakash Regmi, Advisor: Dr. Subrata Acharva

Christian Siemasko, Advisor: Dr. Suranjan Chakraborty

Alexander Arevalo, Advisor: Dr. Subrata Acharya Tejaswini Golusula, Advisor: Dr. Subrata Acharya Archana Korrapati, Advisor: Dr. Subrata Acharya Dharamveer Singh, Advisor: Dr. Weixian Liao

Komal Soni, Advisor: Dr. Weixian Liao Zakina McGee, Advisor: Dr. Subrata Acharya Charles Carr, Advisor: Dr. Subrata Acharya

Gretchen Hook-Podhorniak, Advisor: Dr. Subrata Acharya

Daniel Rodriguez, Advisor: Dr. Subrata Acharya Joseph Kamau, Advisor: Dr. Subrata Acharva Helina Oladapo, Advisor: Dr. Joyram Chakraborty Hassan Alzahrani, Advisor: Dr. Nam Nguyen May Alotaibi, Advisor: Dr. Subrata Acharya

Omotayo Victor Imani, Advisor: Dr. Subrata Acharya Dominic Danger Field, Advisor: Dr. Yeong-Tae Song

Elias Becker, Advisor: Dr. Yeong-Tae Song Jennifer Jones, Advisor: Dr. Yeong-Tae Song

Jun Wang, Advisor: Dr. Nam Nguyen

Maria Camila Rivera Serna, Advisor: Dr. Charles Dierbach Sainitesh Palamakula, Advisor: Dr. Subrata Acharya

Kamshika Navya Sri Gundaram, Advisor: Dr. Subrata Acharya

Nicholas Visalli, Advisor: Dr. Sidd Kaza Kevin Kuo, Advisor: Dr. Wei Yu

Sara Ogaz, Advisor: Dr. Charles Dierbach

Rajiv Varma, Advisor: Dr. Suranjan Chakraborty Hatim Valiuddin, Advisor: Dr. Josh Dehlinger Camden Thatcher, Advisor: Dr. Subrata Acharya Deepika Gorre, Advisor: Dr. Subrata Acharya David Krajewski, Advisor: Dr. Weixian Liao Aparna Swaminathan, Advisor: Dr. Josh Dehlinger

Abdul Alatawi (Bowie State University), Advisor: Dr. Frank Xu

### Undergraduate Students through the INSuRE Project (107 Students, 2018 - 2022)

(Students with a \* have co-authored publications after completing the INSuRE project)

Amro Alsuwaida\*, Wesley Dingman\*, Nicholas Visalli\*, Zachary Brown\*, Manish Joshi\*, Mark Steele\*, Jon Patton\*, Alexander Stoyanov\*, Mark Steele\*, Aviel Cohen\*, Long Chen\*, Matthew Stillwell\*, Timothy Merino\*, Nicholas Ferrara\*, Patrick Jasinski\*, Max Coplan\*, Adam Lynch\*, Tyler Howard\*, Matthew Krause\*, Aman Patel\*, Montrell Jubilee, Khifayat Abolurin, Scott Guthier, JaVonne Harrison, Shayla Key, Stephen McGovern, Brian Morgan, Peter Odaka, Godwin Olletey, Ronny Rivera, Austin Ryan, Joshua Shevitz, Ethan Sitnek, Melissa Trick, Haley Turfle, Wesley Walker, Justin Weagly, Nathan Cox, Cameron Crow, Jose De La Rosa, Hieu Dinh, Nahom Getaneh, James Hooper, Kareem Land Jr, Jacob Lohr, Andrew Noonan, Kyara Pugh, Steven Pugh, Luis Ramos, Rafal Ryczek, Nicholas Taormino, Kristen Thesing, Daniel Thompson, Emily Vogel, Brad Wilfong, Mahnoor Awan, Nick Caruso, Dominic Garguilo, Andrew Glorioso, Shane Homick, Turhan Kimbrough, Ka Ming Lai, Trung Nguyen, Samavi Sultana, Nicholas Wilkins, Anthony Baichulall, Chance Brilz, Alexander Buttrum, Nicholas Castagno, Anthony Catalfamo, Abdoulkarim Dambo, Tyler Dugan, Peter Kafkakis, Harry King, Anthony Panei, Ronald Peralta, Nicholas Schiavone, Daniel Schwarz, Sean Smith, Tyler Smith, Phillip Switlick, Wei Zhang, Ksenia Clark, Nick Garcia, Narisa Jangbahadur, Kyle Allen, Richard Awojoodu, Cole Bennington, Noah Day, Abdulai Dibasy, Andy Gonzalez Campos, Nam Ha, Tucker Howard, William Rooney, Asim Shrestha, Dalton Watts, Andrew Fleming, Sean Hicks, Paulo Manalo, Michael Mhonda, Phuong Dinh Nguyen, Jacob Young, Nicholas Crabill, John Dimelu, Lesley Hernandez, Dagm Kebede, Akeem Laurence, Andrew Stoerkel

Professional Activities

Research mentor, Science and Mathematics Academy, Aberdeen High School (2019 - 2022)

Associate editor, International Journal of Systems and Software Security and Protection (IJSSSP)

Program chair, International Workshop on Software Testing Education (TestEd 2023)

**Program chair**, International Conference on Software Engineering Research, Management and Applications (SERA 2022)

**Program committee member**, International Conference on Software Engineering and Knowledge Engineering

**Program committee member**, International Conference on Software Testing, Verification and Validation (Industry Track)

Program committee member, International Conference on Blockchain

**Program committee member**, International Workshop on Advances in Artificial Intelligence for Blockchain

Program committee member, International Workshop on Mutation Analysis

Program committee member, International Software Testing Education Workshop

**Program committee member**, International Conference on Knowledge Engineering and Ontology Development

Program committee member, International Conference on Software Engineering Advances

**Program committee member**, The  $45^{th}$  IEEE Computer Society Computers, Software, and Applications Conference (COMPSAC 2021)

**Program committee member**, The  $14^{th}$  IEEE International Workshop on Security, Trust & Privacy for Software Applications (STPSA 2019)

**Program committee member**, The 17<sup>th</sup> IEEE/ACIS International Conference on Software Engineering Research, Management and Applications (SERA 2019)

Program committee member, International Conference on Computing, Networking and Com-

munications: Machine Learning for Communication and Networking (ICNC'19 MLCN)

Reviewer, IEEE Internet of Things Journal

Reviewer, Software Quality Journal

Reviewer, IEEE Transactions on Software Engineering

Reviewer, Journal of Software Testing, Verification and Reliability

Reviewer, Computing

Reviewer, IEEE Transactions on Information Forensics and Security

Reviewer, Journal of Software: Evolution and Process

Reviewer, Journal of Systems and Software

Reviewer, IEEE Access

Reviewer, Empirical Software Engineering

**Reviewer**, The  $11^{th}$  IEEE Conference on Software Testing, Validation and Verification (ICST 2018)

Reviewer, International Journal of Software Engineering and Knowledge Engineering, 2018

Reviewer, KSII Transactions on Internet and Information Systems, 2018

Reviewer, Science of Computer Programming

Reviewer, IEEE International Performance Computing and Communications Conference