Tingting Yu

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Research Interests

Software engineering, software testing, software architecture, AI for software engineering , domain-specific software engineering (e.g., bioinformatics, cyber-physical systems).

Professional Experience

Department of Comp $01/2021$ – present	uter Science, University of Cincinnati Associate Professor, Director of Graduate Studies	. Cincinnati, USA
Department of Comp $07/2020 - 12/2020$	uter Science, University of Kentucky Associate Professor	. Lexington, USA
Department of Comp $08/2014 - 06/2020$	uter Science, University of Kentucky Assistant Professor	. Lexington, USA
Department of Comp $05/2010 - 07/2014$	uter Science and Engineering, University of Nebraska - L Graduate Research Assistant	incoln USA
ABB Corporate Resea $05/2012 - 08/2012$	arch Center Research Intern	Raleigh, USA
$\begin{array}{c} \text{Department of Comp}\\ 08/2008-05/2010 \end{array}$	uter Science and Engineering, University of Nebraska - L Graduate Teaching Assistant	$\operatorname{incoln}\ldots\ldots\operatorname{USA}$

Education

University	of Nebraska - Lincoln	Lincoln, USA
08/2014	Doctor of Philosophy in Computer Science	·
	Thesis: An Observable and Controllable Testing I Advisors: Gregg Rothermel and Witawas Srisa-ar	Framework for Modern Software Systems
University	of Nebraska - Lincoln	Lincoln, USA
12/2010	Master of Science in Computer Science	
	Thesis: Testing Embedded System Applications	
	Advisors: Gregg Rothermel and Witawas Srisa-ar	1
Sichuan Un	niversity	Chengdu, China
06/2008	Bachelor of Engineering in Software Engine	eering
	Senior Design Project: An RFID-based Smart Pro-	oduct Tracking System
	Minor: Finance	~ *

Honors and Awards

2019	Invited to Dagstuhl seminar on Characterizing and Modeling Residual Software Bugs
2017	National Science Foundation CAREER Award
2016	ACM SIGSOFT Distinguished Paper Award for C[11]
2016	NSF Travel Award to attend ICSE
2013	Google Travel Award to attend ISSTA
2012	NSF Travel Award to attend ASPLOS
2008-2010	UNL Chancellor's Fellowship

Awarded Research Grants

- G[5] (Lead PI) Collaborative Research: SHF: Medium:Improving Software Quality by Automatically Reproducing Failures from Bug Reports.
 National Science Foundation.
 October 1, 2022 September 30, 2026. \$610,000 (Total: \$1,200,000)
- G[4] (PI) Collaborative Research: SHF: Small:Test-Centric Architecture Modeling.
 National Science Foundation #1909085.
 October 1, 2019 September 30, 2023, \$239,157 (Total: \$500,000)
- G[3] (Sole PI) CAREER: Testing Evolving Complex Software Systems. National Science Foundation #1652149. June 1, 2017 — May 31, 2023, \$501,822
- G[2] (Sole PI) Automated Targeted GUI Testing. Dragon-Testing Technology Dec 1, 2022 —, \$50,000
- G[1] (Sole PI) CRII: SHF: An Automated Framework to Debug System-level Concurrency Faults.
 National Science Foundation #1464032.
 March 1, 2015 — February 28, 2018, \$174,648

Refereed Journal Publications

(Author name followed by an asterisk (*) indicates the author is/was one of my advisees.)

- J[16] Xiao Wang, Lu Xiao, Tingting Yu, Anne Woepse, Sunny Wong, From Inheritance to Mockito: An Automatic Refactoring Approach, In IEEE Transactions on Software Engineering (TSE), 2022.
- J[15] Yu Zhao*, Ting Su, Yang Liu, Wei Zheng, Jingzhi Zhang, Ramakanth Kavuluru, William G.J. Halfond, **Tingting Yu**, *ReCDroid+: Automated end-to-end crash reproduction from bug reports for Android apps*, In ACM Transactions on Software Engineering and Methodology (TOSEM), vol. 31, no. 3, 2022.
- J[14] Justin Chu*, Tingting Yu, Jane Huffman Hayes, Effective Fault Localization and Contextaware Debugging for Concurrent Programs, In Software Testing, Verification and Reliability (STVR), 32, no. 1, 2022.
- J[13] Boqin Qin, Tengfei Tu, Ziheng Liu, Tingting Yu, Linhai Song, Algorithmic Profiling for Real-World Complexity Problems, In IEEE Transactions on Software Engineering (TSE), 2021.

- J[12] Xiaoxue Wu, Wei Zheng, Xiang Chen, Yu Zhao, Tingting Yu, Dejun Mu, Improving High-impact Bug Report Prediction with Combination of Interactive Machine Learning and Active Learning, In Information and Software Technology (IST), vol. 133, 2021.
- J[11] Yu Wang, Fengjuan Gao, Linzhang Wang, Tingting Yu, Jianhua Zhao, Xuandong Li, Automatic Detection, Validation and Repair of Race Conditions in Interrupt-Driven Embedded Software, In IEEE Transactions on Software Engineering (TSE), 2020.
- J[10] Xue Han*, Daniel Carroll*, Tingting Yu, Reproducing Performance Bug Reports in Server Applications: The Researchers' Experiences, Journal of Systems and Software (JSS), 156: 268-282, 2019.
- J[9] Wei Zheng, Chen Feng, Tingting Yu, Xibing Yang, Xiaoxue Wu, Towards Understanding Bugs in An Open Source Cloud Management Stack: An Empirical Study of OpenStack Software Bugs, Journal of Systems and Software (JSS), 151: 210-223, 2019.
- J[8] Yu Zhao*, Yunhuai Liu, Tingting Yu, Chen Qian, Tian He, FREDI: Robust RSS-based Ranging with Multipath Effect and Radio Interference, In Computer Networks (COMPNW), 147: 49-63, 2018, 2018.
- J[7] Tingting Yu, Zunchen Huang*, Chao Wang, ConTesa: Directed Test Suite Augmentation for Concurrent Software, In IEEE Transactions on Software Engineering (TSE), July, 2018.
- J[6] Tingting Yu, Witawas Srisa-an, Myra B. Cohen, Gregg Rothermel, A Hybrid Approach to Testing for Non-Functional Faults in Embedded Systems Using Genetic Algorithms, In Software Testing, Verification and Reliability (STVR), 28.7 (2018): e1686, 2018.
- J[5] Tingting Yu, Wei Wen*, Xue Han*, Jane Huffman Hayes, ConPredictor: Concurrency Defect Prediction in Real-World Applications, In IEEE Transactions on Software Engineering (TSE), vol. PP, no. 99, pp. 1-1, 2018.
- J[4] Tingting Yu, Michael Pradel, Pinpointing and Repairing Performance Bottlenecks in Concurrent Programs, Empirical Software Engineering (EMSE), pp.1-38, 2017.
- J[3] Tingting Yu, Witawas Srisa-an, Gregg Rothermel, SIMEXPLORER: An Automated Framework to Support Testing for System-Level Race Conditions, In Software Testing, Verification and Reliability (STVR), vol. 27, 2017.
- J[2] Tingting Yu, Ahyoung Sung, Witawas Srisa-an, Gregg Rothermel, An Approach to Testing Commercial Embedded Systems, Journal of Systems and Software (JSS), vol. 88, pp. 207-230, 2014.
- J[1] Tingting Yu, Witawas Srisa-an, Gregg Rothermel, Sim-O/C: An Observable and Controllable Testing Framework for Elusive Faults, Intel Technical Journal (ITJ), 2014.

Refereed Full Conference Publications

(Author name followed by an asterisk (*) indicates the author is/was one of my advisees.)

- C[33] Bruno Silva, Clay Stevens, Niloofar Mansoor, Witawas Srisa-An, Tingting Yu, Hamid Bagheri, SAINTDroid: Scalable, Automated Incompatibility Detection for Android, In Proceedings of IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), pp. 567-579, 2022.
- C[32] Xiao Wang, Lu Xiao, Tingting Yu, Anne Woepse, Sunny Wong, An Automatic Refactoring Framework for Replacing Test-Production Inheritance by Mocking Mechanism, In Proceedings of ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), pp. 540-552, 2021.
- C[31] Zhouyang Jia*, Shanshan Li, Tingting Yu, Chen Zeng, Erci Xu, Xiaodong Liu, Ji Wang, Xiangke Liao, DepOwl: Detecting Dependency Bugs to Prevent Compatibility Failures, In Proceedings of International Conference on Software Engineering (ICSE), pp. 86-98, 2021.

- C[30] Xue Han*, Tingting Yu, Michael Pradel, ConfProf: White-Box Performance Profiling of Configuration Options, In Proceedings of International Conference on Performance Engineerin (ICPE), pp. 1-8, 2021.
- C[29] Haochen He, Zhouyang Jia*, Shanshan Li, Erci Xu, Tingting Yu, Yue Yu, Ji Wang, Xiangke Liao, CP-Detector: Using Configuration-related Performance Properties to Expose Performance Bugs, In Proceedings of International Conference on Automated Software Engineering (ASE), pp. 623-634, 2020.
- C[28] Alex Dekhtyar, Jane Hayes, Jennifer Horkoff, Gunter Mussbacher, Irit Hadar, Meira Levy, Tingting Yu, Jared Payne, Barbara Paech, Kim Youngjoon, Jo Eunjung, Heo Seungbum, Hong Youngtaek, Nam Byoungyoung, Koh Sanggon, From RE Cares to SE Cares: Software Engineering for Social Good, One Venue at a Time, In International Conference on Software Software Engineering (ICSE), Software Engineering in Society Track (ICSE SEIS), pp. 49-52, 2020.
- C[27] Tarannum Shaila Zaman*, Xue Han*, Tingting Yu, SCMiner: Localizing System-Level Concurrency Faults from Large System Call Traces, In Proceedings of International Conference on Automated Software Engineering (ASE), pp. 515-526, 2019.
- C[26] Zhouyang Jia*, Shanshan Li, Tingting Yu, Xiangke Liao, Ji Wang, Xiaodong Liu, Yunhuai Liu, *Detecting Error-Handling Bugs without Error Specification Input*, In Proceedings of International Conference on Automated Software Engineering (ASE), pp. 213-225, 2019.
- C[25] Zhouyang Jia*, Shanshan Li, Tingting Yu, Xiangke Liao, Ji Wang, Automatically Detecting Missing Cleanup for Ungraceful Exits, In Proceedings of the ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), pp. 751–762, 2019.
- C[24] Yu Zhao*, Kye Miller*, Tingting Yu, Wei Zheng, Minchao Pu, Automatically Extracting Bug Reproducing Steps from Android Bug Reports, In International Conference on Software and Systems Reuse (ICSR), pp. 100–111, 2019.
- C[23] Yu Zhao*, Tingting Yu, Ting Su, Yang Liu, Wei Zheng, Jingzhi Zhang, William G.J. Halfond, *ReCDroid: Automatically Reproducing Android Application Crashes from Bug Reports*, In International Conference on Software Software Engineering (ICSE), pp. 128–139, 2019.
- C[22] Ting Wang*, Tingting Yu, A Study of Regression Test Selection in Continuous Integration Environments, In Proceedings of International Symposium on Software Reliability Engineering (ISSRE), pp.135–143, 2018.
- C[21] Xue Han*, Tingting Yu, David Lo, PerfLearner: Learning from Bug Reports to Understand and Generate Performance Test Frames, In Proceedings of International Conference on Automated Software Engineering (ASE), pp. 17–28, 2018.
- C[20] Tingting Yu, SimEvo: Testing Evolving Multi-Process Software Systems, Proceedings of International Conference on Software Maintenance and Evolution (ICSME), pp. 204–215, 2017.
- C[19] Tingting Yu, Tarannum Zaman*, Chao Wang, DESCRY: Reproducing System-level Concurrency Failures, In Proceedings of the Joint Meeting on Foundations of Software Engineering (ESEC/FSE), pp. 694–704, 2017.
- C[18] Yu Wang, Linzhang Wang, Tingting Yu, Jianhua Zhao, Xuandong Li, Automatic Detection and Validation of Race Conditions in Interrupt-Driven Embedded Software, In Proceedings of the 26th International Symposium in Software Testing and Analysis (ISSTA), pp. 113–124, 2017.
- C[17] Yu Zhao*, Tingting Yu, Channel Quality Correlation-based Channel Probing in Multiple Channels, In International Conference on Computer Communications and Networks (ICCCN), pp. 1–9, 2017.

- C[16] Yu Zhao*, Huazhe Wang, Xin Li, Tingting Yu, Chen Qian, Pronto: Efficient Test Packet Generation for Dynamic Network Data Planes, In International Conference on Distributed Computing Systems (ICDCS), pp. 13–22, 2017.
- C[15] Wei Wen*, Tingting Yu, Jane Huffman Hayes, CoLUA: Automatically Predicting Configuration Bug Reports and Extracting Configuration Options, In International Symposium on Software Reliability Engineering (ISSRE), pp. 150–161, 2016. (acceptance rate: 35%)
- C[14] Supat Rattanasuksan, Tingting Yu, Witawas Srisa-an, Gregg Rothermel, RRF: A Race Reproduction Framework for use in Debugging Process-Level Races, In International Symposium on Software Reliability Engineering (ISSRE), pp. 162–172, 2016.
- C[13] Xue Han*, Tingting Yu, An Empirical Study on Performance Bugs for Highly Configurable Software Systems, In Proceedings of the 10th International Symposium on Empirical Software Engineering and Measurement (ESEM), pp. 1–10, 2016.
- C[12] Tingting Yu, Michael Pradel, SyncProf: Detecting, Localizing, and Optimizing Synchronization Bottlenecks, Proceedings of the 22th International Symposium on Software Testing and Analysis (ISSTA), pp. 389–400, 2016.
- C[11] Tingting Yu, Xiao Qu, Myra B. Cohen, VDTest: An Automated Framework to Support Testing for Virtual Devices, Proceedings of the 37th International Conference on Software Engineering (ICSE), pp. 583–594, 2016, ACM SIGSOFT Distinguished Paper Award.
- C[10] Tingting Yu, Wei Wen*, Xue Han*, Jane Huffman Hayes, Predicting Testability of Concurrent Programs, Proceedings of the 8th International Conference on Software Testing, Verification and Validation (ICST), pp. 168–179, 2016.
- C[9] Tingting Yu, Myra B. Cohen, Guided Test Generation for Finding Worst-Case Stack Usage in Embedded Systems, Proceedings of the Seventh International Conference on Software Testing, Verification and Validation (ICST), pp. 1–10, 2015.
- C[8] Tingting Yu, Witawas Srisa-an, Gregg Rothermel, SimRT: An Automated Framework to Support Regression Testing for Data Races, Proceedings of the 35th International Conference on Software Engineering (ICSE), pp. 11–20, 2014.
- C[7] Tingting Yu, Witawas Srisa-an, Myra B. Cohen, Gregg Rothermel, SimLatte: A Framework to Support Testing for Worst-Case Interrupt Latencies in Embedded Software, Proceedings of the Seventh International Conference on Software Testing, Verification and Validation (ICST), pp. 313–322, 2014.
- C[6] Tingting Yu, Witawas Srisa-an, Gregg Rothermel, An Empirical Comparison of the Fault-Detection Capabilities of Internal Oracles, The 24th IEEE International Symposium on Software Reliability Engineering (ISSRE), pp. 11–20, 2013.
- C[5] Tingting Yu, Witawas Srisa-an, Gregg Rothermel, SimRacer: An Automated Framework to Support Testing for Process-Level Races, Proceedings of the 22th International Symposium on Software Testing and Analysis (ISSTA), pp. 167–177, 2013.
- C[4] Tingting Yu, Xiao Qu, Mithun Acharya, Gregg Rothermel, Oracle-Based Regression Test Selection, Proceedings of the Sixth International Conference on Software Testing, Verification and Validation (ICST), pp. 292–301, 2013.
- C[3] Tingting Yu, Witawas Srisa-an, Gregg Rothermel, SimTester: A Controllable and Observable Testing Framework for Embedded Systems, Proceedings of the Eighth Annual International Conference on Virtual Execution Environments (VEE), pp. 51–62, 2012.
- C[2] Tingting Yu, Witawas Srisa-an, Gregg Rothermel, Using Property-based Oracles when Testing Embedded System Applications, Proceedings of the Fourth International Conference on Software Testing, Verification and Validation (ICST), pp. 100–109, 2011.

C[1] Ahyoung Sung, Witawas Srisa-an, Gregg Rothermel, Tingting Yu, Testing Inter-layer and Inter-task Interactions in RTES Applications, Proceedings of the 17th Asia-Pacific Software Engineering Conference (APSEC), pp. 260–269, 2010.

Refereed Workshop Publications

(Author name followed by an asterisk (*) indicates the author is/was one of my advisees.)

- W[3] Tarannum Zaman*, Tingting Yu, Extracting Implicit Programming Rules: Comparing Static and Dynamic Approaches, In Proceedings of the 7th International Workshop on Software Mining, co-located with ASE, pp. 1–7, 2018.
- W[2] Xiao Lu, Tingting Yu, Ripple: A Test-aware Architecture Modeling Framework, In International Workshop on Establishing a Community-Wide Infrastructure for Architecture-Based Software Engineering (ECASE), co-located with ICSE, pp. 14–20, 2017.
- W[1] Jane Huffman Hayes, Wenbin Li, Tingting Yu, Xue Han*, Mark Hays, Clinton Woodson, Measuring Requirement Quality to Predict Testability, Proceedings of the 2nd International Workshop on Artificial Intelligence for Requirements Engineering, (AIRE), pp. 1–8, 2015.

Refereed Short Conference Publications

- SC[3] Xiao Wang, Lu Xiao, Tingting Yu, Anne Woepse, Sunny Wong, JMocker: Refactoring Test-Production Inheritance by Mockito, In Proceedings of International Symposium on the Foundations of Software Engineering (FSE). Tool Demo Track, pp. 125–129, 2022.
- SC[2] Tingting Yu, TACO: Test Suite Augmentation for Concurrent Programs, In Proceedings of the Joint Meeting on Foundations of Software Engineering (ESEC/FSE), NIER Track, pp. 918–921, 2015.
- SC[1] Tingting Yu, An Observable and Controllable Testing Framework for Modern Systems, Doctoral Symposium at the Proceedings of the 35th International Conference on Software Engineering (ICSE), pp. 1377–1380, 2013.

Abstracts

(Author name followed by an asterisk (*) indicates the author is/was one of my advisees.)

- A[3] Jane Huffman Hayes, Tingting Yu, ISSRE Cares: How the Software Reliability Engineering Community Can Give Back to Society, In Proceedings of International Symposium on Software Reliability Engineering (ISSRE), Fast Abstract, 2019.
- A[2] Yu Zhao*, Tarannum Shaila Zaman*, Tingting Yu, Jane Huffman Hayes, Using Deep Learning to Improve the Accuracy of Requirements to Code Traceability, Grand Challenges in Traceability (GCT), Abstract, 2017.
- A[1] Jane Huffman Hayes, Giuliano Antoniol, Licong Cui, Tingting Yu, Too Little for Big Data?, Grand Challenges in Traceability (GCT), Abstract, 2017.

Technical Report

T[1] Ahyoung Sung, Witawas Srisa-an, Gregg Rothermel, Tingting Yu, Testing Inter-layer and Inter-task Interactions in RTES Applications, Technical Report TR-UNL-CSE-2010-0006, Department of Computer Science and Engineering, University of Nebraska - Lincoln, 2010.

Teaching

A new course I developed (**). A course I redesigned (*) University of Cincinnati Spring 2021, Fall 2021 CS 5130-001: Advanced Software Engineering** Spring 2022 EECE 3093C-003: Software Engineering University of Kentucky CS 616/585: Software Engineering* Fall 2019 Fall 2018 CS 585/685: Advanced Software Engineering** Fall 2020 Spring 2019, Spring 2018 CS 498: Software Engineering for Senior Project* Fall 2017, Spring 2017, Spring 2016 Spring 2018, Fall 2016, Fall 2015 CS 585/619: Software Testing and Quality Evaluation* Spring 2015 CS 485G: Software Engineering* Fall 2014 CS 585/685: Software Testing and Analysis**

University of Nebraska-Lincoln

Fall 2013	CSCE 351K: Operating System Kernels
Spring 2010	CSCE 251K: Introduction to C
Fall 2008 - Spring 2010	CSCE 156: Introduction to Computer Science II

Professional Service

Conference Organizer

Doctoral Symposium Co-Chair, International Conference on Software Testing,

Validation and Verification (ICST), 2021

Poster Co-Chair, International Conference on Software Engineering (ICSE), 2020

Tool Demonstration Co-Chair, International Symposium on Software Testing and Analysis (ISSTA), 2020 Co-Chair, The Ada Workshop at International Symposium on Software Testing and Analysis (ISSTA), 2019

Co-Chair, The ISSTA Workshop on Testing, Analysis, and Verification of

Cyber-Physical Systems and Internet of Things (TAV-CPS/IoT), 2017, 2018, 2019

Co-Chair, International Workshop on Requirements Engineering and Testing (RET), 2019

PC Co-Chair, International Workshop on Requirements Engineering and Testing (RET), 2017, 2018

Publicity Co-Chair, International Conference on Software Testing, Validation and Verification (ICST), 2017, 2023 Executive Committee Member, Grand Challenge of Traceability (GCT), 2017

Local Arrangement Co-Chair, International Conference on Automated Software Engineering (ASE), 2015

Program Committee Member (conference)

International Conference on Software Engineering (ICSE), 2020, 2021, 2023 International Symposium on the Foundations of Software Engineering (ESEC/FSE), 2020, 2021, 2022 International Conference on Automated Software Engineering (ASE), 2018, 2019, 2020, 2021 International Symposium on Software Testing and Analysis (ISSTA), 2019, 2020, 2021, 2023 International Conference on Software Testing, Verification and Validation (ICST), 2016, 2018, 2019 ICSE Tool Demonstrations Track (ICSE Tool), 2022 ESEC/FSE Tool Demonstrations Track (ESEC/FSE Tool), 2020, 2021, 2022 ICST Poster Track (ICST Poster), 2020 ASE Artifacts Evaluation Track, 2021, 2022 ESEC/FSE Artifacts Evaluation Track, 2021, 2022 ECOOP/ISSTA Doctoral Symposium, 2021 ICST Doctoral Symposium, 2020, 2021, 2022 The Annual ACM Southeast Conference (ACMSE), 2019, 2020 The Annual Conference on Software Analysis, Testing and Evolution (SATE), 2018, 2019 Computer Software and Applications Conference (COMPSAC), 2018, 2019, 2020 International Conference on Software Engineering Advances (ICSEA), 2018, 2019 ICSE Student Research Competition (ICSE SRC), 2017, 2018 ISSTA Tool Demonstrations Track (ISSTA Tool), 2018 International Conference on Requirements Engineering (RE), 2017 International Conference Electro Information Technology (EIT), 2017 ICST Tool Demonstrations Track (ICST Tool), 2016 International Conference on Information Systems Security (ICISS), 2016 CCF ChinaSoft, 2022

Program Committee Member (workshop)

ICSE Workshop, 2022

ICSE Workshop on Realizing Artificial Intelligence Synergies in Software Engineering (RAISE), 2020 International Workshop on Verification and Validation of Internet of Things (VVIoT), Collocated with ICST 2018, 2019 Workshop on Testing: Academia-Industry Collaboration, Practice and Research Techniques (TAIC-PART), Co-located with ICST 2019

Journal Reviewer

IEEE, Transactions on Software Engineering (TSE) ACM, Transactions on Software Engineering and Methodology (TOSEM) IEEE, Transactions on Reliability (TR) Springer, Empirical Software Engineering (EMSE) Elsevier, Journal of Systems and Software (JSS) Wiley, Journal of Software: Evolution and Process (JSME) Science China, Information Sciences (SCIS) Elsevier, Software Testing, Verification and Reliability (STVR) Elsevier, Information and Software Technology (INFSOF) Springer, Journal on Software and Systems Modeling (SoSyM) Frontier, of Computer Science (FCS) Springer, Software Quality Journal (SQJ) Elsevier, Science of Computer Programming (SCICO) IET, Software IET, Cyber-Physical Systems: Theory & Applications (CPS) ACM, Transactions on Embedded Computing Systems (TECS) Journal Editorial Board

Springer, Empirical Software Engineering (EMSE), 2020-present

Journal Review Board

Springer, Empirical Software Engineering (EMSE), 2017/2018

Proposal Reviewer

National Science Foundation (NSF) Panelist, 2018, 2020, 2021 Kentucky Science & Engineering Foundation (KSEF), 2018 Other Service ISSTA Student Travel Grant, Selection Committee Member, 2019 ICST Doctoral Symposium, Panelist, 2017, 2022

University and Public Service

University of Cincinnati Director of Graduate Studies (2022-present), CS department Chair of Faculty Search Committee (2022-present), CS department Department Bylaws Committee (2022-present), CS department CS Representative on Joint Co-op Institute (JCI) Search Committee (2022-present), CEAS CS Department Head Search Committee (2022), College of Engineering and Applied Sciences (CEAS) Department Search Committee (2021), EECS department Department Scholarship Committee (2021), EECS department

University of Kentucky Department Higher Degrees Committee (2014-2020) Department ACM-W Faculty Sponsor (2017-2020) Department Outstanding Paper Award Committee (2019-2020) College Faculty Staff Giving Campaign Committee (2016, 2017)

Public Service The Hour of Code, 2014, 2016, 2017 Kentucky Girls STEM, 2014

Students

Graduated Ph.D. student

- Xue Han, 01/2015 08/2019, now an Assistant Professor at University of Southern Indiana Dissertation: ConfProfitt: A Configuration-aware Performance Profiling, Testing, and Tuning Framework
- Yu Zhao, 01/2016 08/2020, now an Assistant Professor at University of Central Missouri Dissertation: Automated Testing and Bug Reproduction of Android Apps
- Tarannum Shaila Zamman, 08/2015 05/2022, now an Assistant Professor at SUNY Polytechnic Institute
 Dissertation: An Automated Framework to Debug System-Level Concurrency Failures

Current funded Ph.D. students

- Dingbang Wang, 08/2021 present
- Shuai Shao, 01/2022 present

Current funded M.S. students

• Ryan Green, 08/2022 – present

Graduated M.S. Students

- Tanner Coffman (Project, May 2020)
- Ting Wang (Thesis, May 2019)
- Justin Chu (co-advised by Jane Huffman Hayes), (Thesis, December 2017)
- Wei Wen (co-advised by Jane Huffman Hayes), (Thesis, January 2017).

Funded Undergraduate Research Assistants

- Minh Nguyen, 05/2022 present
- Kye Miller, REU, 01/2019 05/2020
- Alexander Schuster, REU, 05/2019 05/2020
- Kyle Nelson, REU, 05/2018 04/2019
- Ellis Darin, REU, 05/2017 05/2018
- Taylor Ecton, REU, 05/2017 12/2018
- Natsagdorj Baljinnyam, 01/2017 08/2017
- Daniel Carroll, 01/2017 12/2017
- Bill Miller, 01/2017 12/2017
- Zunchen Huang, 01/2015 12/2017

Visiting Student

• Zhouyang Jia, China National University of Defense Technology, 08/2018 - 08/2020

Ph.D. Committee Member

- Hemanth Gudaparthi (EECS@UC), Zedong Peng (EECS@UC), Haipeng Li (EECS@UC), Md Selim (CS@UK), Enrico Casella (CS@UK), Pinyi Shi (CS@UK), Hassan Mistareehi (CS@UK), Ningzhou Zeng (CS@UK), Yan Huang (CS@UK), Mustafa Lahmar (EE@UK)
- M.S. Committee Member
 - Rohit Nair, Bencheng Su, Yuanyuan Wu, Xi Wu, Kai Wang, David Farrar, Satrio Husodo, Zhenhui Piao, Mami Hayashida, Bhushan Chitre, AKM Sabbir, Golnar Bidkhori, Albert Kalim, Lakshmi Prasann Adiraju, Jayanti Andhale, Dawei Liu, Zachary May, Yosef Bernardus Wirian, Peng He, Anirban Chakraborthy, Sumaira Shamim, James Hunsucker, Ankita Sharma, Vamsi Puttireddy, Vaishnavi Konda