Xiaoyin Wang
Associate Professor
Department of Computer Science
University of Texas at San Antonio

Email: Xiaoyin.Wang@utsa.edu
Phone: 1-510-246-9966
Date of CV Revision: 21st Jan. 2023

Education and Training

Jan. 2012- Jul. 2013	Postdoctoral Fellow, Computer Science, University of California at Berkeley
Sept. 2006- Jan. 2012	Ph.D., Computer Science, Peking University

Research Interests

1. Software Evolution and Testing

2. Mobile App Analysis

3. Software Mining and Analysis

Professional Experience

1. Assistant / Associate Professor, Department of Computer Science, University of Texas at San Antonio, Aug. 2013 -- now

2. Postdoctoral Researcher, School of EECS, UC Berkeley, Jan. 2012 -- Aug. 2013

3. Research Assistant, Software Engineering Institute, School of EECS, Peking University, Oct. 2006 -- Jan. 2012

4. Research Intern, Team of Software Analytics, Microsoft Research Asia, Aug. 2011 -- Dec. 2011

5. Research Fellow, School of Information Systems, Singapore Management University, Oct. 2008 -- Sept. 2009

Awards & Honors

1. ACM SIGSOFT 2020 Research Highlight, 05/2021

2. UTSA President's Research Achievement Award, 05/2019.

3. NSF CAREER Award, 04/2019

4. Distinguished Ph.D. Dissertation Award, CCF (China Computer Federation, 10 awardees every year in all Computer Science PhD Students in China), 01/2013

5. Microsoft Research Asia Fellowship, Microsoft Research Asia (25 awardees every year in all Computer Science PhD Students in Asia), 09/2009

Research Grants

1. Lead PI, NSF SHF Small: Migration and Reuse of GUI Tests (NSF-2007718), $250,000 (UTSA Share), Jul. 2020 to June 2023 (Co-PI: Jianwei Niu). This is a Collaboration Grant of $500,000 total with Na Meng from Virginia Tech. UTSA is the Leading Institution.

2. PI, NSF CCRI: Planning: Collaborative Research: A Platform for Conducting Software Engineering User Studies (NSF-2016604), $28,000 (UTSA Share), Jul. 2020 to Apr. 2022. This is a Collaboration Grant of $100,000 total with Thomas Latoza from George Mason University and Joshua Sunshine from Carnegie Mellon University, George Mason is the leading institution.

3. Sole PI, NSF CAREER: Analysis and Repair of Build Scripts for DevOps Software Practice (NSF-1846467), $492,358, Apr. 2019 to Mar. 2024.

4. Co-PI, PAM: A Pattern-Based Measurement Model for Improving Software Reliability, Phase II, MSRDC, Department of the Army, $45,250, June 2018 to Jan. 2019 (PI: Jianwei Niu)

5. PI, NSF EAGER: Tracing Privacy-Policy Statements into Code for Privacy-Aware Mobile App Development (NSF-1748109), $144,488, July. 2017 to July. 2020 (Co-PI: Jianwei Niu)

6. Co-PI, PAM: A Pattern-Based Measurement Model for Improving Software Reliability, MSRDC, Department of the Army, $46,750, July 2017 to Jan. 2018 (PI: Jianwei Niu)

7. Sole PI, NSF CRII: SHF: AutoBuilder: Automatically Building Software Projects for Analysis of Software Repositories (NSF-1464425), $174,840, Mar. 2015 to Feb. 2018

8. Co-PI, Analyses and Training for Defense of Biological and Digital Threats, US Department of Homeland Security (DHS-14-ST-062-001), $1,500,000, Sept. 2014 to Aug. 2020 (PI: Bernard Arulanandam)

Publications

Selected Journal Publications

1. Inferring Bug Signatures to Detect Real Bugs
   Hao Zhong, **Xiaoyin Wang**, Hong Mei
   IEEE Transactions on Software Engineering, Vol. 48, No. 2, 571-584, Feb. 2022

2. The symptoms, causes, and repairs of bugs inside a deep learning library
   Li Jia, Hao Zhong, **Xiaoyin Wang**, Linpeng Huang, Xuansheng Lu
   Journal of Systems and Software, Vol. 177, Jul. 2021.

3. An Interleaving Approach to Combinatorial Testing and Failure-Inducing Interaction Identification
   Xintao Niu, Changhai Nie, Hareton Leung, Yu Lei, **Xiaoyin Wang**, Jiaxi Xu and Yan Wang
   IEEE Transactions on Software Engineering, Vol. 46, No. 6, 584-615, June 2020

4. Identifying Failure-Causing Schemas in the Presence of Multiple Faults
   Xintao Niu, Changhai Nie, Yu Lei, Hareton Leung and **Xiaoyin Wang**
   IEEE Transactions on Software Engineering, Vol. 46, No. 2, 141-162, Feb. 2020

5. A Survey on Bug Report Analysis
   Jie Zhang, **Xiaoyin Wang**, Dan Hao, Bing Xie, Lu Zhang and Hong Mei
   Sciences China (Information Sciences), Vol. 58, No. 2, 1—24, Feb. 2015.

6. Predicting Consistency-Maintenance Requirement of Code Clones at Copy-and-Paste Time
   Xiaoyin Wang, Yingnong Dang, Lu Zhang, Dongmei Zhang, Erica Lan, Hong Mei
   IEEE Transactions on Software Engineering, Vol. 40, No. 8, 773--794, Aug. 2014.

7. Locating Need-to-Externalize Constant Strings for Software Internationalization with Generalized String Taint Analysis
   Xiaoyin Wang, Lu Zhang, Tao Xie, Hong Mei, Jiasu Sun
   IEEE Transactions on Software Engineering, Vol. 39, No. 4, 516--536, Apr. 2013.

8. Checking Enforcement of Integrity Constraints in Database Applications based on Code Patterns
   Hongyu Zhang, Hee Beng Kuan Tan, Lu Zhang, Xi Lin, **Xiaoyin Wang**, Chun Zhang, Hong Mei
   Journal of Systems and Software, Vol. 84, No. 12, 2253--2264, Dec. 2011.

9. Test Input Reduction for Result Inspection to Facilitate Fault Localization
   Dan Hao, Tao Xie, Lu Zhang, **Xiaoyin Wang**, Jiasu Sun, Hong Mei
   Automated Software Engineering (ASE Journal), Vol. 17, No. 1, 5--31, Jan. 2010.

Selected Conference Publications

10. PExReport: Automatic Creation of Pruned Executable Cross-Project Failure Reports
    Sunzhou Huang and Xiaoyin Wang
    International Conference on Software Engineering (ICSE), May 2023, To Appear.

11. PredART: Towards Automatic Oracle Prediction of Object Placements in Augmented Reality Testing
    Tahmid Rafi, Xueling Zhang, **Xiaoyin Wang**
    International Conference on Automated Software Engineering (ASE), paper 207, Oct. 2022.

12. VRTest: An Extensible Framework for Automatic Testing of Virtual Reality Scenes
    Xiaoyin Wang
    International Conference on Software Engineering: Companion Proceedings (ICSE-Companion), Tool Demo, pp. 232-236, May 2022.

13. How Do Injected Bugs Affect Deep Learning?
    Li Jia, Hao Zhong, **Xiaoyin Wang**, Linpeng Huang, Zexuan Li
    IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), pp. 793-804, Mar. 2022.

14. A Lightweight Approach of Human-Like Playtest for Android Apps
    Yan Zhao, Enyi Tang, Haipeng Cai, Xi Guo, **Xiaoyin Wang**, Na Meng
    IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), pp. 309-320, Mar. 2022.

15. Accelerating Program Analyses in Datalog by Merging Library Facts
    Yifan Chen, Chenyang Yang, Xin Zhang, Yingfei Xiong, Hao Tang, **Xiaoyin Wang**, Lu Zhang
    International Static Analysis Symposium, pp. 77-101, Oct. 2021.

16. How Developers Optimize Virtual Reality Applications: A Study of Optimization Commits in Open Source Unity Projects
    Fariha Nusrat, Foyzul Hassan, Hao Zhong, **Xiaoyin Wang**
    International Conference on Software Engineering (ICSE), 473-485, May 2021.

17. How Does Misconfiguration of Analytic Services Compromise Mobile Privacy?
    Xueling Zhang, **Xiaoyin Wang**, Rocky Slavin, Travis Breaux, Jianwei Niu
    International Conference on Software Engineering (ICSE), pp. 1572--1583, Jul. 2020,
    ACM SIGSOFT 2020 Research Highlight

18. Taming Behavioral Backward Incompatibilities via Cross-Project Testing and Analysis
    Lingchao Chen, Foyzul Hassan, **Xiaoyin Wang**, Lingming Zhang
    International Conference on Software Engineering (ICSE), pp. 112--124, Jul. 2020

19. Leveraging Code Generation to Improve Code Retrieval and Summarization via Dual Learning
Wei Ye, Rui Xie, Jinglei Zhang, Tianxiang Hu, **Xiaoyin Wang** and Shikun Zhang
The Web Conference (WWW), pp. 2309—2319, Apr. 2020

20. TestMig: Migrating GUI test cases from iOS to Android
Xue Qin, Hao Zhong, **Xiaoyin Wang**
International Symposium on Software Testing and Analysis (ISSTA), pp. 284-295, Jul. 2019

21. Toward a reliability measurement framework automated using deep learning
John Heaps, Xueling Zhang, **Xiaoyin Wang**, Travis Breaux, Jianwei Niu
Annual Symposium on Hot Topics in the Science of Security (HotSos), Article No. 25, Apr. 2019

22. IconIntent: automatic identification of sensitive UI widgets based on icon classification for Android apps
Xusheng Xiao, **Xiaoyin Wang**, Zhihao Cao, Hanlin Wang, Peng Gao
International Conference on Software Engineering (ICSE), pp. 257-268, May 2019

23. CSOD: context-sensitive overflow detection
Hongyu Liu, Sam Silvestro, **Xiaoyin Wang**, Lide Duan, Tongping Liu
International Symposium on Code Generation and Optimization (CGO), pp. 50--60, Feb. 2019

24. RUDSEA: recommending updates of Dockerfiles via software environment analysis
Foyzul Hassan, Rodney Rodriguez, **Xiaoyin Wang**
ACM/IEEE International Conference on Automated Software Engineering (ASE), New Idea Track, pp. 796-801, Sept. 2018.

25. Automatic Clone Recommendation for Refactoring Based on the Present and the Past
Ruru Yue, Zhe Gao, Na Meng, Yingfei Xiong, **Xiaoyin Wang**, David Morgenthaler
International Conference on Software Maintenance and Evolution (ICSME), pp. 115-126, Sept. 2018

26. GUILeak: Tracing Privacy Policy Claims on User Input Data for Android Applications
Xiaoyin Wang, Xue Qin, Mitra Bokaei Hosseini, Rocky Slavin, Travis D. Breaux, Jianwei Niu,
International Conference on Software Engineering (ICSE), pp. 37-47, May, 2018

27. HireBuild: An Automatic Approach to History-Driven Repair of Build Scripts
Foyzul Hassan and **Xiaoyin Wang**
International Conference on Software Engineering (ICSE), pp. 1078-1089, May, 2018

28. Boosting Complete Code Tool for Partial Program
Hao Zhong and **Xiaoyin Wang**
ACM/IEEE Conference on Automated Software Engineering (ASE), 671-581, Nov, 2017

29. Change-Aware Build Prediction Model for Stall Avoidance in Continuous Integration
Foyzul Hassan, **Xiaoyin Wang**
ACM/IEEE Symposium on Empirical Software Engineering and Measurement (ESEM), 157-162, Nov, 2017

30. Automatic Building of Java Projects in Software Repositories: A Study on Feasibility and Challenges
Foyzul Hassan, Shaikh Mostafa, Edmund Lam, **Xiaoyin Wang**
ACM/IEEE Symposium on Empirical Software Engineering and Measurement (ESEM), 38-47, Nov, 2017

31. PerfRanker: Prioritization of Performance Regression Tests for Collection-Intensive Software
Shaikh Mostafa, **Xiaoyin Wang**, and Tao Xie
International Symposium on Software Testing and Analysis (ISSTA), 23--34, Jul, 2017.

32. Experience Paper: A Study on Behavioral Backward Incompatibilities of Java Software Libraries
Shaikh Mostafa, Rodney Rodriguez, and **Xiaoyin Wang**
International Symposium on Software Testing and Analysis (ISSTA), 215--225, Jul, 2017.

33. NTApps: A Network Traffic Analyzer of Android Applications
Rodney Rodriguez, Shaikh Mostafa, and **Xiaoyin Wang**
Tool Demo, *ACM Symposium on Access Control Models and Technologies (SACMAT)*, 199--206, June, 2017.

34. NetDroid: Summarizing Network Behaviors of Android Applications for Network Code Maintenance
Shaikh Mostafa, Rodney Rodriguez, and **Xiaoyin Wang**,
International Conference on Program Comprehension (ICPC), 165-175, May, 2017.

35. Mining Readme Files to Support Automatic Building of Java Projects in Software Repositories
Foyzul Hassan and **Xiaoyin Wang**
Poster Session, International Conference on Software Engineering (ICSE), 277-279, May, 2017.

36. Conditional Dyck-CFL Reachability Analysis for Complete and Efficient Library Summarization

Hao Tang, Di Wang, Yingfei Xiong, Lingming Zhang, **Xiaoyin Wang**, Lu Zhang
Proceedings of 26th European Symposium on Programming (ESOP), 880-908, Uppsala, Sweden, Apr. 2017.

37. PVDetector: A Detector of Privacy-Policy Violations for Android Apps
Rocky Slavin, **Xiaoyin Wang**, Mitra Bokaei Hosseini, William Hester, Ram Krishnan, Jaspreet Bhatia, Travis D. Breaux, Jianwei Niu
Proceedings of International Conference on Mobile Software Engineering and Systems (MobileSoft), pp. 299-300, Austin, Texas, May. 2016.

38. Toward a Framework for Detecting Privacy Policy Violation in Android Application Code
Rocky Slavin, **Xiaoyin Wang**, Mitra Bokaei Hosseini, William Hester, Ram Krishnan, Jaspreet Bhatia, Travis D. Breaux, Jianwei Niu
Proceedings of International Conference on Software Engineering(ICSE), pp. 25-36, Austin, Texas, May. 2016.

39. Experience Report: How is Dynamic Symbolic Execution Different from Manual Testing? - A Study on KLEE.
Xiaoyin Wang, Lingming Zhang, Philip Tanofsky
International Symposium on Software Testing and Analysis (ISSTA), pp. 199-210, Baltimore, Jul. 2015

40. An Empirical Study on the Status of Software Localization in Open Source Projects
Zeyad Alshaikh, Shaikh Mostafa, **Xiaoyin Wang**, Sen He
International Conference on Software Engineering and Knowledge Engineering (SEKE), pp. 692-695, Pittsburg, Jul. 2015

41. Summary-Based Context-Sensitive Data-Dependence Analysis in Presence of Callbacks
Hao Tang, **Xiaoyin Wang**, Lingming Zhang, Lu Zhang, Bing Xie, Hong Mei
ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL), pp. 83-95, Mumbai, India, Jan., 2015.

42. An Empirical Study on the Usage of Mocking Frameworks in Software Testing
Nahid Mostafa, **Xiaoyin Wang**
IEEE International Conference on Quality Software (QSIC), pp. 127-132, Oct. 2014, Dallas, USA.

43. NetworkProfiler: Towards Automatic Fingerprinting of Android Apps
Shuaifu Dai, Alok Tongaonkar, **Xiaoyin Wang**, Antonio Nucci, Dawn Song
The 32nd IEEE International Conference on Computer Communications (INFOCOM), pp. 809--817, Apr. 2013, Turin, Italy.

44. Automating Presentation Changes in Dynamic Web Applications via Collaborative Hybrid Analysis

Xiaoyin Wang, Lu Zhang, Tao Xie, Yingfei Xiong, Hong Mei,
Proceedings of ACM SIGSOFT Symposium on Foundations of Software Engineering (SIGSOFT FSE), article 16, Nov. 2012, Raleigh, US

45. Can I Clone This Piece of Code Here?
Xiaoyin Wang, Yingnong Dang, Lu Zhang, Dongmei Zhang, Eric Lan, Hong Mei
Proceedings of IEEE/ACM Conference on Automated Software Engineering (ASE), 170--179, Sept. 2012, Essen, Germany.

46. A History-Based Matching Approach to Identification of Framework Evolution
Sichen Meng, **Xiaoyin Wang**, Lu Zhang, Hong Mei,
Proceedings of International Conference on Software Engineering(ICSE), 353--363, June 2012, Zurich, Switzerland

47. Bug signature minimization and fusion
David Lo, Hong Cheng, **Xiaoyin Wang**
Proceedings of International Conference on High-Assurance Systems Engineering (HASE), 340--347, Nov. 2011, Miami, USA.

48. Locating Need-to-Translate Constant Strings in Web Applications
Xiaoyin Wang, Lu Zhang, Tao Xie, Hong Mei, and Jiasu Sun
Proceedings of ACM SIGSOFT Symposium on Foundations of Software Engineering (SIGSOFT FSE), 87--96, Nov. 2010, Santa Fe, USA.

49. Matching Dependence-Related Queries in the System Dependence Graph
Xiaoyin Wang, David Lo, Jiefeng Cheng, Lu Zhang, Hong Mei, and Jeffery Xu Yu
Proceedings of International Conference on Automated Software Engineering (ASE), 457--466, Sept. 2010, Antwerp, Belgium

50. A Discriminative Model Approach for Accurate Duplicate Bug Report Retrieval
Chengnian Sun, David Lo, **Xiaoyin Wang**, Jing Jiang, and Siau-Cheng Khoo
Proceedings of International Conference on Software Engineering (ICSE), 45--54 May 2010, Cape Town, South Africa

51. JDF: detecting duplicate bug reports in Jazz
Yoonki Song, Xiaoyin Wang, Tao Xie, Lu Zhang, Hong Mei
Proceedings of International Conference on Software Engineering (ICSE), Vol. 2, 315--316, Tool Demo, May 2010, Cape Town, South Africa

52. Extracting Paraphrases of Technical Terms from Noisy Parallel Software Corpus
Xiaoyin Wang, David Lo, Jing Jiang, Lu Zhang and Hong Mei
Proceedings of Joint conference of the 47th Annual Meeting of the Association for Computational Linguistics and the 4th International Joint Conference on Natural Language Processing of the Asian Federation of Natural Language Processing (ACL-IJCNLP), short papers, 197--200, Aug. 2009, Singapore

53. Identifying Bug Signatures Using Discriminative Graph Mining
Hong Cheng, David Lo, Yang Zhou, **Xiaoyin Wang**, and Xifeng Yan
Proceedings of International Symposium on Software Testing and Analysis (ISSTA),
141--152, Jul. 2009, Chicago, USA

54. Locating Need-to-Translate Constant Strings for Software Internationalization
Xiaoyin Wang, Lu Zhang, Tao Xie, Hong Mei, and Jiasu Sun
Proceedings of International Conference on Software Engineering (ICSE), 353--363,
May 2009, Vancouver, Canada

55. TranStrL: An Automatic Need-to-Translate String Locator for Software
Internationalization
Xiaoyin Wang, Lu Zhang, Tao Xie, Hong Mei, and Jiasu Sun
Proceedings of International Conference on Software Engineering (ICSE), Formal
Tool Demo, 555--558, May 2009, Vancouver, Canada

56. An Approach to Detecting Duplicate Bug Reports using Natural Language and
Execution Information
Xiaoyin Wang, Lu Zhang, Tao Xie, John Anvik, and Jiasu Sun
Proceedings of International Conference on Software Engineering (ICSE), 461--470,
May 2008, *Leipzig, Germany*

Professional Services

Committee Chairs and Members

1. Proceedings Chair: The 41st International Conference on Software Engineering
(ICSE 2019)

2. Workshop Co-Chair: The International Workshop on Virtual and Augmented Reality
Software Engineering (VARSE 2022)

3. Workshop Co-Chair: The International Workshop on Software Mining (SoftMine'
2015/2016/2017/2018)

4. PC Member: International Conference on Software Engineering, New Ideas and
Emerging Results Track, (ICSE 2023-NIER)

5. PC Member: International Conference on Software Engineering, Tool Demo Track,
(ICSE 2022-Tool Demo)

6. PC Member: International Conference on Software Engineering (ICSE 2021)

7. PC Member: International Conference on Software Testing, Verification and
Validation (ICST 2021/2022/2023)

8. PC Member: International Conference on Automated Software Engineering (ASE 2019/2021)

9. PC Member: The International Symposium on Software Testing and Analysis (ISSTA 2019)

10. PC Member: The International Workshop on Software Clones (IWSC' 2015/2016/ 2017/2018)

11. PC Member: The International Conference on Software Engineering and Knowledge Engineering (SEKE' 2015/2016/2017/2018)

12. PC Member: The 24th International Conference on Program Comprehension, Short Paper Track, (ICPC'16 Short)

13. PC Member: SEIP Track of the 38th International Conference on Software Engineering (ICSE' 16 SEIP)

14. PC Member: International Workshop on System Level Security of Smart Phones (SLSS'14)

15. PC Member: The 7th International Conference on Service Oriented Software Engineering (SOSE'13)

Journal Editors and Reviewers

16. Associate Editor, International Journal on Software Testing, Verification, and Reliability (STVR), since 2019

17. Reviewer, IEEE Transactions on Software Engineering (TSE), 2017-2022

18. Reviewer, ACM Transactions on Software Engineering and Methodology (TOSEM), 2020-2022

19. Reviewer, IEEE Transactions on Dependable and Secure Computing (TDSC), 2020-2022

20. Reviewer, Empirical Software Engineering (ESE), 2017-2022

21. Reviewer, IEEE Transactions on Service Computing (TSC), 2015

22. Reviewer, 3 papers, Journal of Computer Science and Technology (JCST), 2015, 2016

23. Reviewer, ACM Transactions on Computer Human Interaction (TOCHI), 2014

24. Reviewer, IEEE Software, 2014

25. Reviewer, Simulation Modeling, Practice and Theory (SIMPAT), 2014

26. Reviewer, International Journal of Computer Science and Application (IJCSA), 2014

27. Reviewer, 2 papers, International Journal on Software Testing, Verification, and Reliability (STVR), 2012, 2016

Thesis

String Origin Analysis and its Applications in Software Maintenance Tasks, PhD Dissertation, Jan. 2012

Identification of Event Categories in Event Extraction of Chinese, Bachelor's Thesis, Jul. 2006

Teaching

Courses Taught

Instructor, CS3773 Software Engineering, Undergraduate Course, Department of Computer Science, University of Texas at San Antonio, Spring 2018, Fall 2019, Fall 2020, Spring 2021, Summer 2022

Instructor, CS4723/CS5123 Software Validation and Quality Assurance, Cross-listed Course, Department of Computer Science, University of Texas at San Antonio, Spring 2014, Spring 2015, Fall 2016, Fall 2017, Fall 2018, Fall 2019, Fall 2020, Fall 2022

Instructor, CS5363 Programming Languages and Compilers, Graduate Course, Department of Computer Science, University of Texas at San Antonio, Spring 2016, Spring 2017, Spring 2019, Spring 2020, Spring 2022

Instructor, CS5103 Software Engineering, Graduate Course, Department of Computer Science, University of Texas at San Antonio, Fall 2013, Fall 2014, Fall 2015, Spring 2021, Spring 2022

Instructor, CS 4593 Cloud-Oriented Big Data and Software Engineering, Undergraduate Course, Department of Computer Science, University of Texas at San Antonio, Fall 2015

Instructor, CS 4593 Pathogenic Outbreak Inv, Undergraduate Course, Department of Computer Science, University of Texas at San Antonio, Spring 2015

Thesis Committee Chairs

PhD's Dissertation, Rodney Rodriguez, Static File Path Analysis for Reliable Resource Locating, April 2022. (Currently working at Accenture)

PhD's Dissertation (Co-chair), Xueling Zhang, Reducing False Negatives in Taint Analysis via Hybrid Source Inference, December 2021. (Currently working as a tenure-track faculty at Rochester Institute of Technology)

PhD's Dissertation (Co-chair), John Heaps, Code Element Vector Representations Through the Application of Natural Language Processing Techniques for Automation of Software Privacy Analysis, August 2021. (Currently working as a non-tenure-track faculty at UTSA)

PhD's Dissertation, Foyzul Hassan, Tackling Build Failures in Continuous Integration, April 2020. (Currently working as a tenure-track faculty at University of Michigan-Dearborn)

PhD's Dissertation, Xue Qin, Understanding User Interface for Intelligent Software Analysis and Exploration, April 2020. (Currently working as a tenure-track faculty at Villanova University)

PhD's Dissertation, Shaikh Mostafa, Dependency-Oriented Test Prioritization for Efficient Regression Testing, March 2018. (Currently working at Microsoft)

Master's thesis, Fariha Nusrat, An Empirical Analysis of Unity Performance Bugs, July 2020.

Master's thesis, Rodney Rodriguez, A Framework for File Flow Analysis, December 2017.

Master's thesis, Irving Rodriguez, Dynamic Occlusion Culling Using Octrees with Unity for Virtual Reality, Fall 2015.

Master's thesis, Al Amin Hossain, Strengthened Regression Testing with Fine-Grained Object Comparison, Fall 2015.

Master's thesis, Philip Tanofsky, A Study on the Difference between Dynamic Symbolic Execution and Manual Testing, Spring 2014.

Department Services

Search Committee Chair, Aug. 2022 to Now
Graduate Studies Committee Chair, Sept. 2022 to Now

Faculty Review Committee Member, Sept. 2019 to May 2022

Library Liaison, Sept. 2013 to Aug. 2014, Sept. 2015 to Now

Graduate Studies Committee Member, Sept. 2014 to Now

Graduate Recruitment Committee Member, Sept. 2013 to Aug. 2015

Curriculum Committee Member, Sept. 2013 to Aug. 2015