Wing Lam

✉ winglam@gmu.edu
cs.gmu.edu/∼winglam
Google Scholar Profile

Research Interests

My research interests are in Software Engineering, with a focus on Software Testing and Analysis, AI and Software Engineering, Software Evolution, and Software Dependability. Recent topics include detecting and fixing flaky tests, generating test inputs, testing mobile apps, optimizing continuous development, and improving software engineering education.

Employment

Jan. 2022 – now Assistant Professor, Computer Science, George Mason University (GMU)

Oct. 2021 – now Part Time Applied Research Scientist, Fraunhofer USA Center Mid-Atlantic, Software Systems Engineering Division

Education

2015 – 2021 **PhD Computer Science**, *University of Illinois Urbana-Champaign (UIUC)*
Advisors: Darko Marinov and Tao Xie

2010 – 2013 **BSc Computer Science with Distinction**, *University of Washington (UW)*
Advisors: Michael D. Ernst and David Notkin

Honors and Awards

2022 ACM SIGSOFT Outstanding Doctoral Dissertation Award (International)

2020 Google – CMD-IT FLIP Alliance Fellowship (National)

2018 Yunni & Maxine Pao Memorial Fellowship (Institutional)

2017 NSF Graduate Research Fellowship Honorable Mention (National)

2016 State Farm Companies Foundation Doctoral Scholarship (Institutional)

2016 Qualcomm Innovation Fellowship Finalist (International)

2015 Ray Ozzie Computer Science Fellowship (Institutional)

2015 Illinois Technology Foundation Fifty for the Future Award (Regional)

Research Track Publications

ICST'24 [18] Safwat Ali Khan, Wenyu Wang, Yiran Ren, Bin Zhu, Jiangfan Shi, **Wing Lam**, and Kevin Moran. AURORA: Navigating UI Tarpits via Automated Neural Screen Understanding. *17th IEEE International Conference on Software Testing, Verification and Validation*, pages to appear, (Toronto, Canada), 2024. Acceptance rate: 25% (28/112)

ICST'24 [17] Shanto Rahman, Aaron Massey, **Wing Lam**, August Shi, and Jonathan Bell. Automatically Reproducing Timing-Dependent Flaky-Test Failures. *17th IEEE International Conference on Software Testing, Verification and Validation*, pages to appear, (Toronto, Canada), 2024. Acceptance rate: 25% (28/112)

ASE'23 [16] Talank Baral, Shanto Rahman, Bala Naren Chanumolu, Basak Balci, Tuna Tuncer, August Shi, and **Wing Lam**. Optimizing Continuous Development By Detecting and Preventing Unnecessary Content Generation. *38th Annual International Conference on Automated Software Engineering*, pages 901–913, (Kirchberg, Luxembourg), 2023. Acceptance rate: 21% (134/630)

ISSTA'23 [15] Chengpeng Li, Mahdi Khosravi, **Wing Lam**, and August Shi. Systematically Producing Test-Orders to Detect Order-Dependent Flaky Tests. *2023 International Symposium on Software Testing and Analysis*, pages 627–638, (Seattle, WA, USA), 2023. Acceptance rate: 13% (20/159)

ICSE'22 [14] Anjiang Wei, Pu Yi, Zhengxi Li, Tao Xie, Darko Marinov, and **Wing Lam**. Preempting Flaky Tests via Non-Idempotent-Outcome Tests. *44th International Conference on Software Engineering*, pages 1730–1742, (Pittsburgh, PA, USA), 2022. Acceptance rate: 26% (197/751)

TACAS'22 [13] Pu Yi, Hao Wang, Tao Xie, Darko Marinov, and **Wing Lam**. A Theoretical Analysis of Random Regression Test Prioritization. *28th International Conference on Tools and Algorithms for the Construction and Analysis of Systems*, pages 217–235, (Munich, Germany), 2022. Acceptance rate: 31% (50/159)

ISSTA'21 [12] Wenyu Wang, **Wing Lam**, and Tao Xie. An Infrastructure Approach to Improving Effectiveness of Android UI Testing Tools. *2021 International Symposium on Software Testing and Analysis*, pages 165–176, (Virtual Event), 2021. Acceptance rate: 22% (51/233)

TACAS'21 [11] Anjiang Wei, Pu Yi, Tao Xie, Darko Marinov, and **Wing Lam**. Probabilistic and Systematic Coverage of Consecutive Test-Method Pairs for Detecting Order-Dependent Flaky Tests. *27th International Conference on Tools and Algorithms for the Construction and Analysis of Systems*, pages 270–287, (Virtual Event), 2021. Acceptance rate: 33% (47/141)

ICSE'20 [10] **Wing Lam**, Kıvanç Muşlu, Hitesh Sajnani, and Suresh Thummalapenta. A Study on the Lifecycle of Flaky Tests. *42nd International Conference on Software Engineering*, pages 1471–1482, (Virtual Event), 2020. Acceptance rate: 21% (129/617) **This paper was featured in Google's Software Engineering and Programming Languages Journal Club**

OOPSLA'20 [9] **Wing Lam**, Stefan Winter, Anjiang Wei, Tao Xie, Darko Marinov, and Jonathan Bell. A Large-Scale Longitudinal Study of Flaky Tests. *35th ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications*, pages 202:1–202:29, (Virtual Event), 2020. Acceptance rate: 36% (109/302)

ISSTA'20 [8] **Wing Lam**, August Shi, Reed Oei, Sai Zhang, Michael D. Ernst, and Tao Xie. Dependent-Test-Aware Regression Testing Techniques. *2020 International Symposium on Software Testing and Analysis*, pages 298–311, (Virtual Event), 2020. Acceptance rate: 27% (43/162)

ISSRE'20 [7] **Wing Lam**, Stefan Winter, Angello Astorga, Victoria Stodden, and Darko Marinov. Understanding Reproducibility and Characteristics of Flaky Tests Through Test Reruns in Java Projects. *31st IEEE International Conference on Software Reliability Engineering*, pages 403–413, (Virtual Event), 2020. Acceptance rate: 26% (38/148)

ESEC/FSE'19 [6] August Shi, **Wing Lam**, Reed Oei, Tao Xie, and Darko Marinov. iFixFlakies: A Framework for Automatically Fixing Order-dependent Flaky Tests. *27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering*, pages 545–555, (Tallinn, Estonia), 2019. Acceptance rate: 24% (74/303)

ISSTA'19 [5] **Wing Lam**, Patrice Godefroid, Suman Nath, Anirudh Santhiar, and Suresh Thummalapenta. Root Causing Flaky Tests in a Large-scale Industrial Setting. *2019 International Symposium on Software Testing and Analysis, Experience Paper*, pages 101–111, (Beijing, China), 2019. Acceptance rate: 20% (29/142)

ICST'19 [4] **Wing Lam**, Reed Oei, August Shi, Darko Marinov, and Tao Xie. iDFlakies: A Framework for Detecting and Partially Classifying Flaky Tests. *12th IEEE International Conference on Software Testing, Verification and Validation*, pages 312–322, (Xi'an, China), 2019. Acceptance rate: 29% (31/110)

ICPC'19 [3] Hao Yu, **Wing Lam**, Long Chen, Ge Li, Tao Xie and Qianxiang Wang. Neural Detection of Semantic Code Clones via Tree-Based Convolution. *27th IEEE/ACM International Conference on Program Comprehension*, pages 70–80, (Montreal, Canada), 2019. Acceptance rate: 26% (24/93)

ECOOP'18 [2] **Wing Lam**, Siwakorn Srisakaokul, Blake Bassett, Peyman Mahdian, Pratap Lakshman, and Jonathan de Halleux. A Characteristic Study of Parameterized Unit Tests in .NET Open Source Projects. *32nd European Conference on Object-Oriented Programming*, pages 5:1–5:27, (Amsterdam, Netherlands), 2018. Acceptance rate: 39% (26/66)

ISSTA'14 [1] Sai Zhang, Darioush Jalali, Jochen Wuttke, Kıvanç Muşlu, **Wing Lam**, Michael D. Ernst, and David Notkin. Empirically Revisiting the Test Independence Assumption. *2014 International Symposium on Software Testing and Analysis*, pages 385–396, (San Jose, CA, USA), 2014. Acceptance rate: 28% (36/128)
This paper was featured in Google's Software Engineering and Programming Languages Journal Club

Other Publications

9 other publications (3 industry track, 2 workshop, 1 data showcase track, 1 demonstrations track, 1 dissertation, 1 student research competition)

TestEd'23 [9] Sajed Jalil, Suzzana Rafi, Thomas D. LaToza, Kevin Moran, and **Wing Lam**. ChatGPT and Software Testing Education: Promises & Perils. *2nd Software Testing Education Workshop*, pages 4130–4137, (Dublin, Ireland), 2023.

ICSE DEMO'22 [8] Ruixin Wang, Yang Chen, and **Wing Lam**. iPFlakies: A Framework for Detecting and Fixing Python Order-Dependent Flaky Tests. *44th International Conference on Software Engineering, Demonstrations Track*, pages 120–124, (Pittsburgh, PA, USA), 2022. Acceptance rate: 50% (49/98)

PhD'21 [7] **Wing Lam**. Detecting, Characterizing, and Taming Flaky Tests. *PhD thesis, University of Illinois at Urbana-Champaign*, (Urbana, IL, USA), 2021. **This work won the ACM SIGSOFT Outstanding Doctoral Dissertation Award!**

SEN'21 [6] Pu Yi, Anjiang Wei, **Wing Lam**, Tao Xie, and Darko Marinov. Finding Polluter Tests Using Java PathFinder. *ACM SIGSOFT Software Engineering Notes*, (Virtual Event), 2021.

MSR DS'18 [5] Ripon K. Saha, Yingjun Lyu, **Wing Lam**, Hiroaki Yoshida, and Mukul R. Prasad. Bugs.jar: A Large-scale, Diverse Dataset of Real-world Java Bugs. *15th Working Conference on Mining Software Repositories, Data Showcase (DS) track*, pages 10–13, (Gothenburg, Sweden), 2018. Acceptance rate: 58% (14/24)

ESEC/FSE'17 [4] Industry — **Wing Lam**, Zhengkai Wu, Dengfeng Li, Wenyu Wang, Haibing Zheng, Hui Luo, Peng Yan, Yuetang Deng, and Tao Xie. Record and Replay for Android: Are We There Yet in Industrial Cases? *11th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, Industry track*, pages 854–859, (Paderborn, Germany), 2017.

ICSE SEIP'17 [3] — Haibing Zheng, Dengfeng Li, Xia Zeng, Beihai Liang, Wujie Zheng, Yuetang Deng, **Wing Lam**, Wei Yang, and Tao Xie. Automated Test Input Generation for Android: Towards Getting There in an Industrial Case. *39th International Conference on Software Engineering, Software Engineering in Practice (SEIP) track*, pages 253–262, (Buenos Aires, Argentina), 2017. Acceptance rate: 29% (31/107)

FSE'16 [2] Industry — Xia Zeng, Dengfeng Li, Wujie Zheng, Fan Xia, Yuetang Deng, **Wing Lam**, Wei Yang, and Tao Xie. Automated Test Input Generation for Android: Are We Really There Yet in an Industrial Case? *24th ACM SIGSOFT International Symposium on the Foundations of Software Engineering, Industry track*, pages 987–992, (Seattle, WA, USA), 2016.

FSE SRC'16 [1] — **Wing Lam**. Repairing Test Dependence. *24th ACM SIGSOFT International Symposium on the Foundations of Software Engineering, Student Research Competition (SRC)*, pages 1121–1123, (Seattle, WA, USA), 2016.

Research Grants

2023 — *Collaborative Research: SHF: Medium: Bug Report Management 2.0*, National Science Foundation. Funded amount: $408,677 (**GMU's share: $238,622**), Former Principal Investigator: Andrian Marcus

2023 — *Collaborative Research: CCRI: Planning-C: An Infrastructure and Dataset for Research in Android Testing & Analysis*, National Science Foundation. Funded amount: $100,000 (**GMU's share: $66,250**)

2022 — *Toward Automated Human-like Testing of Android Apps*, Dragon Testing. **Funded amount: $50,000**

Teaching Experience

GMU, Fall'23 — Instructor for SWE 637 (Graduate-level): Software Testing

GMU, Spring'23 — Instructor for SWE 637 (Graduate-level): Software Testing

GMU, Fall'22 — Instructor for SWE 437 (Undergraduate-level): Software Testing and Maintenance

GMU, Spring'22 — Instructor for SWE 437 (Undergraduate-level): Software Testing and Maintenance

UIUC, Fall'17 — Teaching Assistant for CS 498 ST (Graduate-level): Software Testing

UW, Fall'13 — Teaching Assistant for CS 331 (Undergraduate-level): Software Design and Implementation

UW, Winter'13 — Teaching Assistant for CS 331 (Undergraduate-level): Software Design and Implementation

Research Advising

*Mentoring and co-advising the research of **five graduate** students*

- Talank Baral (PhD, George Mason University)
  - Co-authored: ASE'23 [16]
- Bala Naren Chanumolu (MS, George Mason University)
  - Co-authored: ASE'23 [16]
- Safwat Ali Khan (PhD, George Mason University, co-advised with Kevin Moran)
  - Co-authored: ICST'24 [18]
- Md. Mahmudul Hasan Pious (PhD, George Mason University)
- Suzzana Rafi (PhD, George Mason University)
  - Co-authored: TestEd'23 [9]

*Mentored and co-advised the research of **two graduate** students and **13 undergraduate** students*

- Basak Balci (BS, Ozyegin University. Next: MS, Technical University of Munich)
  - Co-authored: ASE'23 [16]
- Yang Chen (BS, Huazhong University of Science and Technology. Next: PhD, University of Illinois at Urbana-Champaign)
  - Co-authored: ICSE DEMO'22 [8]
- Dengfeng Li (MS, UIUC. Next: Salesforce)
  - Co-authored: ESEC/FSE Industry'17 [4], ICSE SEIP'17 [3], FSE Industry'16 [2]
  - Award(s): 2017 Siebel Scholar
- Jiefang Lin (BS, Southern University of Science and Technology, China)
- Reed Oei (BS, UIUC. Next: PhD, University of California, Los Angeles)
  - Co-authored: ISSTA'20 [8], ESEC/FSE'19 [6], ICST'19 [4]
  - Award(s): Runner Up of the 2021 CRA Outstanding Undergraduate Researcher Award, NSF Graduate Research Fellowship
- Jackie Oh (BS, UIUC. Next: Stripe, Inc.)
  - Award(s): 2019 PURE Best Presentation Award, 2019 Engineering Visionary Scholarship, 2018 National Merit PPG Foundation Scholarship, 2018 Spyglass Endowed Scholarship
- Tuna Tuncer (BS, Ozyegin University. Next: MS, Technical University of Munich)
  - Co-authored: ASE'23 [16]
- Hao Wang (BS, Peking University. Current: BS, Peking University)
  - Co-authored: TACAS'22 [13]
- Ruixin Wang (BS, Zhejiang University. Next: PhD, Purdue University)
  - Co-authored: ICSE DEMO'22 [8]
- Anjiang Wei (BS, Peking University. Next: PhD, Stanford University)
  - Co-authored: ICSE'22 [14], TACAS'21 [11], OOPSLA'20 [9]
- Henry Wu (BS, UIUC. Next: MEng, Cornell University)
  - Award(s): 2017 Barbara H. and Brian L. Renwick Electrical Engineering Scholarship
- Jinlin Xu (BS, UIUC. Next: MS, University of Pennsylvania)
  - Award(s): 2019 Yunni and Maxine Pao Memorial Scholarship, 2018 Fiddler Innovation Undergraduate Fellowship
- Pu Yi (BS, Peking University. Next: PhD, Stanford University)
  - Co-authored: ICSE'22 [14], TACAS'22 [13], TACAS'21 [11], SEN'21 [6]
- Hao Yu (MS, Peking University. Next: PhD, Peking University)
  - Co-authored: ICPC'19 [3]
- Yule Zhang (BS, George Mason University)

Service to Professional Community

PC Co-Chair	MOBILESoft 2024 Research Track
PC Co-Chair	ASE 2024 Journal-First Track
PC Co-Chair	FSE 2024 Doctoral Symposium
PC Member	FSE 2024 Research Track, ISSTA 2024 Research Track, ICST 2024 Research Track, ISSTA 2023 Research Track, ICST 2023 Research Track, ASE 2022 Research Track, ISSRE 2022 Research Track, ICPC 2022 ERA Track, ICSE 2022 Demonstration Track, ESEC/FSE 2021 Industry Track, OOPSLA 2020 Student Research Competition, OOPSLA 2018 Artifact Evaluation, ISSTA 2018 Artifact Evaluation, OOPSLA 2017 Artifact Evaluation, ISSTA 2017 Artifact Evaluation
Panelist	LEAP Alliance 2023: Why Go to Graduate School, ISSTA 2022: Doctoral Symposium, Tapia 2018: Disability Disclosure in Education and Employment
Mentor	GMU Aspiring Scientists Summer Internship Program (ASSIP) in 2023, 2022
Judge	Thomas Jefferson High School Science Fair in 2023
Reviewer	TSE 2023, TSE 2022, EMSE 2021, TSE 2021, TSE 2020, TOSEM 2020
Mentor	UIUC Promoting Undergraduate Research in Engineering (PURE) in 2019, 2018, 2017, 2016
Mentor	UIUC Mentoring Undergraduates in Science and Engineering (MUSE) in 2018, 2017
Ambassador	UIUC CS Department Graduate Student Ambassador in 2020, 2019, 2018, 2017, 2016
Presenter	UIUC Prospective Graduate Students Visit Days in 2019, 2018

Industry Experience

2019	Microsoft Research Intern at Redmond, WA USA ◦ Published ICSE'20 [10]
2018	Microsoft Research Intern at Redmond, WA USA ◦ Published ISSTA'19 [5]
2017	Fujitsu Laboratories of America Research Intern at Sunnyvale, CA USA ◦ Published MSR DS'19 [5]
2016	Microsoft Research Intern at Cambridge, UK ◦ Won **first place** at Microsoft Hackathon competition
2014 – 2015	Whitepages Inc. Mobile Software Engineer at Seattle, WA USA ◦ Full-time software developer, building mobile apps for both Android and iOS
2013	Google Intern: Advertising Mobile (AdMob) Infrastructure Development at Mountain View, CA USA ◦ Won **first place** at Google Glass Hackathon competition

Notable Open-Source Contributions

My GitHub ID — `https://github.com/winglam`

International Dataset of Flaky Tests (IDoFT) — A dataset of **6000+** flaky tests detected in **100+** real-world projects and **3500+** flaky tests addressed. The dataset is obtained through my own research, my supervision of students, and the contributions of others (300+ detected and 100+ fixed are by others). One important obstacle to performing research on flaky tests has been obtaining a dataset of flaky tests in real-world projects. The goal of the dataset is to crowd-source such a dataset and to compile a variety of information (e.g., failure rates, flakiness-introducing commits) about flaky tests. IDoFT is available at `https://github.com/TestingResearchIllinois/idoft`

iDFlakies — iDFlakies is a framework for detecting and partially classifying flaky tests (ICST'19 [4]). iDFlakies reruns tests in different orders and considers as flaky any tests that fail (but passed in another run). iDFlakies further classifies each detected flaky test as order-dependent or non-order-dependent. iDFlakies detected **400+** flaky tests in open-source GitHub projects, where 50.5% of these flaky tests are order-dependent and 49.5% are non-order-dependent. iDFlakies is available at `https://github.com/iDFlakies/iDFlakies`

iFixFlakies — iFixFlakies is a framework for automatically fixing order-dependent flaky tests (ESEC/FSE'19 [6]). iFixFlakies finds tests in the test suite that contain logic for resetting/setting state for order-dependent tests to pass. Once iFixFlakies finds these tests, it minimizes the code from those tests to generate a patch to apply to the order-dependent test such that it passes when run in the failing order. iFixFlakies automatically fixed **100+** order-dependent tests from open-source GitHub projects. iFixFlakies is available at `https://github.com/TestingResearchIllinois/iFixFlakies`

Presentations

15 seminar talks, 11 conference talks, 8 posters, 6 guest lectures, 5 invited talks

Seminar Talk — *Systematic and Lightweight Techniques to Preempt Flaky Tests*, Mathematics Seminar, National Institute of Standards and Technology (NIST), December 2023

Poster — *MObile app Data collection and AnaLysis (MODAL): An Infrastructure for Improving Mobile App Quality*, National Science Foundation CIRC Principal Investigators Meeting, Salt Lake City, UT, USA, November 2023

Conference Talk — *Optimizing Continuous Development By Detecting and Preventing Unnecessary Content Generation*, ASE 2023, Kirchberg, Luxembourg, September 2023

Seminar Talk — *Systematic and Lightweight Techniques to Preempt Flaky Tests*, Hong Kong University of Science and Technology, Spring 2023

Seminar Talk — *Taming Flaky Tests in a Non-Deterministic World*, Aarhus University, Fall 2022

Seminar Talk — *Taming Flaky Tests in a Non-Deterministic World*, Stevens Institute of Technology, Fall 2022

Seminar Talk — *Taming Flaky Tests in a Non-Deterministic World*, University of Toronto, Fall 2022

Seminar Talk — *Taming Flaky Tests in a Non-Deterministic World*, University of Washington, Fall 2022

Conference Talk — *iPFlakies: A Framework for Detecting and Fixing Python Order-Dependent Flaky Tests*, ICSE DEMO 2022, Pittsburgh, PA, USA, May 2022

Seminar Talk — *Taming Flaky Tests in a Non-Deterministic World*, PLSE Seminar, National University of Singapore, Spring 2022

Invited Talk	*Taming Flaky Tests in a Non-Deterministic World*, Drexel University, Spring 2021
Invited Talk	*Taming Flaky Tests in a Non-Deterministic World*, George Mason University, Spring 2021
Invited Talk	*Taming Flaky Tests in a Non-Deterministic World*, Hong Kong University of Science and Technology, Spring 2021
Invited Talk	*Taming Flaky Tests in a Non-Deterministic World*, Oregon State University, Spring 2021
Invited Talk	*Taming Flaky Tests in a Non-Deterministic World*, University of Victoria, Spring 2021
Guest Lecture	*Taming Flaky Tests in a Non-Deterministic World*, CS 428 (Software Engineering II), UIUC, Spring 2021
Conference Talk	*A Large-Scale Longitudinal Study of Flaky Tests*, OOPSLA 2020, Virtual event, November 2020
Seminar Talk	*A Large-Scale Longitudinal Study of Flaky Tests*, Brett Daniel Software Engineering Seminar, UIUC, Fall 2020
Guest Lecture	*A Large-Scale Longitudinal Study of Flaky Tests*, CS 527 (Topics in Software Engineering), UIUC, Fall 2020
Conference Talk	*Understanding Reproducibility and Characteristics of Flaky Tests Through Test Reruns in Java Projects*, ISSRE 2020, Virtual event, October 2020
Seminar Talk	*Understanding Reproducibility and Characteristics of Flaky Tests Through Test Reruns in Java Projects*, Brett Daniel Software Engineering Seminar, UIUC, Fall 2020
Guest Lecture	*Understanding Reproducibility and Characteristics of Flaky Tests Through Test Reruns in Java Projects*, CS 527 (Topics in Software Engineering), UIUC, Fall 2020
Conference Talk	*Dependent-Test-Aware Regression Testing Techniques*, ISSTA 2020, Virtual event, July 2020
Conference Talk	*A Study on the Lifecycle of Flaky Tests*, ICSE 2020, Virtual event, July 2020
Poster	*iDFlakies: A Framework for Detecting and Partially Classifying Flaky Tests*, Grad Cohort Workshop for Underrepresented Minorities and Persons with Disabilities (URMD), Austin, TX, USA, March 2020
Seminar Talk	*Flaky tests are not to be feared – they are only to be understood*, University of Texas at Dallas, March 2020
Guest Lecture	*Flaky tests are not to be feared – they are only to be understood*, CS 428 (Software Engineering II), UIUC, Spring 2020
Conference Talk	*Root Causing Flaky Tests in a Large-scale Industrial Setting*, ISSTA 2019, Beijing, China, July 2019
Conference Talk	*iDFlakies: A Framework for Detecting and Partially Classifying Flaky Tests*, ICST 2019, Xi'an, China, April 2019
Poster	*iDFlakies: A Framework for Detecting and Partially Classifying Flaky Tests*, Huawei Software Engineering Research Summit 2019, Champaign, IL, USA, March 2019
Seminar Talk	*iDFlakies: A Framework for Detecting and Partially Classifying Flaky Tests*, Brett Daniel Software Engineering Seminar, UIUC, Spring 2019
Guest Lecture	*Flaky tests – Overview, Recent work, and Future work*, CS 427 (Software Engineering I), UIUC, Fall 2018

Poster	*Towards Root Causing Flaky Tests in a Large-scale Industrial Setting*, Microsoft PhD Summit 2018, Redmond, WA, USA, October 2018
Conference Talk	*A Characteristic Study of Parameterized Unit Tests in .NET Open Source Projects*, ECOOP 2018, Amsterdam, Netherlands, July 2018
Poster	*A Characteristic Study of Parameterized Unit Tests in .NET Open Source Projects*, ECOOP 2018, Amsterdam, Netherlands, July 2018
Seminar Talk	*A Characteristic Study of Parameterized Unit Tests in .NET Open Source Projects*, Brett Daniel Software Engineering Seminar, UIUC, Spring 2018
Poster	*How Useful Are Bug Reports in Writing Failure-Reproducing Tests?*, Grad Cohort Workshop for Underrepresented Minorities and Persons with Disabilities (URMD), San Diego, CA, USA, March 2018
Conference Talk	*Record and Replay for Android: Are We There Yet in Industrial Cases?*, ESEC/FSE 2017, Paderborn, Germany, September 2017
Poster	*Record and Replay for Android: Are We There Yet in Industrial Cases?*, ESEC/FSE 2017, Paderborn, Germany, September 2017
Semnar Talk	*Automated Testing Tools for Android: Are We There Yet in Industrial Cases?*, Chinese University of Hong Kong, December 2017
Seminar Talk	*Automated Testing Tools for Android: Are We There Yet in Industrial Cases?*, Hong Kong University, December 2017
Seminar Talk	*Automated Testing Tools for Android: Are We There Yet in Industrial Cases?*, Hong Kong University of Science and Technology, December 2017
Guest Lecture	*Detection and Accommodation of Test Dependence*, CS 427 (Software Engineering I), UIUC, Fall 2017
Conference Talk	*Preliminary Analysis of Code Hunt Data Set from a Contest*, FSE 2016, Seattle, WA, USA, November 2016
Poster	*Repairing Test Dependence*, FSE 2016, Seattle, WA, USA, November 2016
Seminar Talk	*When Tests Collide: Evaluating and Coping with the Impact of Test Dependence*, Brett Daniel Software Engineering Seminar, UIUC, Fall 2015