



KEVIN GUAN

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EDUCATION

Cornell University

Ph.D. in Computer Science

Advisor: Prof. Owolabi Legunsen

Aug 2023 – Present

University of California, Davis

B.S. in Computer Science

Sep 2019 – Jun 2023

PUBLICATIONS

Pengyue Jiang, **Kevin Guan**, Mahdi Khosravi, Moustafa Ismail, Marcelo d’Amorim, and Owolabi Legunsen. “*Fine-Grained Analyses for Evolution-Aware Runtime Verification*”. The 48th International Conference on Software Engineering (ICSE 2026), pages: to appear, Rio de Janeiro, Brazil, April 2026.

Kevin Guan, Marcelo d’Amorim, and Owolabi Legunsen. “*Faster Explicit-Trace Monitoring-Oriented Programming for Runtime Verification of Software Tests*”. The ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA 2025), pages 3696–3725, Singapore, October 2025.

Kevin Guan and Owolabi Legunsen. “*TraceMOP: An Explicit-Trace Runtime Verification Tool for Java*”. The 33rd ACM International Conference on the Foundations of Software Engineering, Demonstrations Track (FSE Demo 2025), pages 1218–1222, Trondheim, Norway, June 2025.

Kevin Guan and Owolabi Legunsen. “*Instrumentation-Driven Evolution-Aware Runtime Verification*”. The 47th IEEE/ACM International Conference on Software Engineering (ICSE 2025), pages 103–115, Ottawa, Canada, April–May 2025.

Kevin Guan and Owolabi Legunsen. “*An In-depth Study of Runtime Verification Overheads during Software Testing*”. The 33rd International Symposium on Software Testing and Analysis (ISSTA 2024), pages 1798–1810, Vienna, Austria, September 2024.

Hao-Nan Zhu, **Kevin Guan**, Robert Furth, and Cindy Rubio-González. “*ActionsRemaker: Reproducing GitHub Actions*”. The 45th International Conference on Software Engineering, Demonstrations Track (ICSE Demo 2023), pages 11–15, Melbourne, Australia, May 2023.

RESEARCH EXPERIENCE

Graduate Research Assistant

Cornell University

Jun 2024 – Present

Undergraduate Research Assistant

University of California, Davis

Apr 2022 – Jul 2023

TEACHING

Teaching Assistant for CS 5430: System Security

Cornell University

Spring 2025

Teaching Assistant for CS 1110: Intro to Computing: Design & Development

Cornell University

Spring 2024

Teaching Assistant for CS 5154: Software Testing

Cornell University

Fall 2023

CS Tutoring Club Tutor

University of California, Davis

Spring 2022, Fall 2022, Winter 2023, Spring 2023

PRESENTATIONS

- Conference Talk** *Oct 2025*
Faster Explicit-Trace Monitoring-Oriented Programming for Runtime Verification of Software Tests. OOPSLA 2025, Singapore.
- Conference Talk** *Jun 2025*
A Tool for Generating Exceptional Behavior Tests With Large Language Models. FSE Demo 2025, Trondheim, Norway.
- Conference Talk** *Jun 2025*
TraceMOP: An Explicit-Trace Runtime Verification Tool for Java. FSE Demo 2025, Trondheim, Norway.
- Conference Talk** *Apr 2025*
Instrumentation-Driven Evolution-Aware Runtime Verification. ICSE 2025, Ottawa, Canada.
- Guest Lecture** *Apr 2025*
Instrumentation-Driven Evolution-Aware Runtime Verification. CS 6156 (Runtime Verification), Cornell University.
- Guest Lecture** *Feb 2025*
An In-Depth Study of Runtime Verification Overheads during Software Testing. CS 6156 (Runtime Verification), Cornell University.
- Tutorial** *Dec 2023*
Evaluating Fault Detection, Test Generation and Program Repair Techniques using BugSwarm. FSE Tutorial 2023, San Francisco, CA.