

Hengchen Yuan

☎(+86) 133-73xx-xxxx | ✉ hcyuan@utexas.edu | 🌐 Github: yhcrown

RESEARCH INTEREST

My research aims to improve the reliability of software systems. I am interested in leveraging testing, analysis, and verification techniques to make software systems more reliable and robust

EDUCATION

The University of Texas at Austin Austin, TX, USA
Ph.D. student in Software Engineering & System, advisor: Prof. August Shi (Expected) Aug. 2023 – Present

Southern University of Science and Technology Shenzhen, China
B.S. in Computer Science & Engineering Aug. 2019 – June 2023 (Expected)

PUBLICATION

- [2]. **ISSTA '2023 | Third-party Library Dependency for Large-scale SCA in the C/C++ Ecosystem: How Far Are We?** [paper] [code]
Ling Jiang, Hengchen Yuan, Qiyi Tang, Sen Nie, Shi Wu, Yuqun Zhang
The 32nd International Symposium on Software Testing and Analysis, July 17-21, 2023, pages to appear, Seattle, Washington, USA
- [1]. **ICSE'2023 | Evaluating and Improving Hybrid Fuzzing** [paper] [code]
Ling Jiang, Hengchen Yuan, Mingyuan Wu, Lingming Zhang, Yuqun Zhang
The 45th International Conference on Software Engineering, May 14-20, 2023, pages to appear, Australia

EXPERIENCE

Undergraduate Research Assistant Shenzhen, China
Laboratory of ARiSE, SUSTech, advisor: Prof. Yunqun Zhang June 2020 – Present

Remote Summer Research Intern Champaign, IL, USA
iSE Lab, UIUC, advisor: Prof. Lingming Zhang June 2022 – Aug 2022

Undergraduate Teaching Assistant Shenzhen, China
4 courses TA in SUSTech 2021 - 2023
Courses: *Introduction to Computer Programming (2021 Spring), Artificial Intelligence (2022 Autumn), Object-Oriented Analysis and Design (2022 Spring), Operating System (2023 Spring)*

SELECTED AWARDS

Outstanding graduate Award, SUSTech 2023

Outstanding Undergraduate Thesis, SUSTech 2023

China National Scholarship | Top 0.2% 2022

SUSTech Special Prize of School Motto Scholarship | Top 0.3% 2022

Meritorious Winner in National College Interdisciplinary Contest in Modeling 2021

Merit Student of SUSTech 2020- 2022

OPEN-SOURCE CONTRIBUTION

My work helped discover 40+ previously unknown bugs in more than 10 open-source famous command line tools (e.g. Binutils, Libtiff), of which 8 have been assigned CVE numbers

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, Matlab, GoLang
Frameworks: JUnit, Springboot, Netty, Mybatis
Developer Tools: Git, Docker, VS Code, PyCharm, IntelliJ
Libraries: pandas, NumPy, Pytorch, LibFuzzer