YUJIN ZHANG

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EDUCATION

Nanjing University, China   Sep 2021 - Present
Bachelor of Engineering (B.E.) in Software Engineering (Expected)
Overall GPA: 4.56/5.00 Ranking: 10/259

RESEARCH EXPERIENCE

Social Dynamics of Fixing Common Vulnerabilities and Exposures(CVEs)   Aug 2024 - Present
Advised by Prof. Haojian Jin at University of California San Diego

- Conducted a mixed-method analysis over 500 recent CVEs entries and associated events from GitHub Python projects to study how participants take different roles and collaborate with shared responsibility in fixing CVEs.
- Identified key factors statistically significant in accelerating the successful resolution of CVEs within open-source software communities.

Trust Label Design for Open Source Software   Mar 2024 - July 2024
Advised by Prof. Haojian Jin at University of California San Diego

- Conducted interviews with 12 software engineers to identify the metrics they use to assess the trustworthiness of OSS projects on GitHub.
- Designed TrustPercentile.md, a Markdown-formatted label that consolidates human factors-related information about open-source software projects and developed a web service to enable authenticated users to automatically generate TrustPercentile.md files..
- Conducted a usability study with 13 novice OSS consumers, demonstrating TrustPercentile's effectiveness in helping people identify more expert-agreed risk signals.

Scaling Inter-procedural Dataflow Analysis on the Cloud   Nov 2023 - Aug 2024
Advised by Prof. Zhiqiang Zuo at Nanjing University

- Proposed a novel incremental distributed algorithm to accelerate incremental interprocedural dataflow analysis, and implemented the algorithm on the general distributed graph processing platform, Apache Giraph.
- Developed BigDataflow-Incremental, a framework running on a real-world cloud, which provides a variety of high-level APIs to simplify the implementation of client dataflow analyses.
- Evaluated the performance and scalability of BigDataflow-Incremental over large-scale software systems (e.g., Linux kernel), demonstrating its ability to finish incremental analysis of program of millions of lines of code in minutes.

AWARDS AND HONORS

Outstanding Student of Nanjing University	Sep 2022, Sep 2023
Nitori International Scholarship (Top 5%)	Sep 2023
Tencent Scholarship of Nanjing University (Top 3%)	Sep 2022
Second Prize in National High School Mathematics Competition of China	Sep 2020
First Prize in National Olympiad in Informatics (Provinces)	Nov 2018

TECHNICAL STRENGTHS

Technical Skills	Programming Languages (Python, C/C++, Java), Frontend (HTML, CSS, JavaScript), Backend (Spring Boot, Redis), Big Data Analytics (Hadoop, Kafka)
Languages	Chinese Mandarin (native), English (S24 in TOEFL)