HENGLI LIU

Education

Guangdong University Of Finances and Economics, Guangzhou, China

Bachelor of Engineering, Computer Science and Technology

Sep. 2020 - July 2024(expected)

Overall GPA: 3.76, Ranking: 3/105(TOP 5%), and I received a national scholarship once and a college-level scholarship once.

Research

Vulnerability Identification | Research Assistant

Mar. 2022 - Present

Advisor: Lec. Yinhao Xiao at Guangdong University of Finance and Economics

- > Researched automated vulnerability identification schemes. In the research group I was mainly responsible for replication and comparison of similar papers as well as writing processing programs to extract data such as AST, CFG, and PDG from source code according to the needs of the group.
- > Now one paper accepted by Future Generation Computer Systems, and one is under review.
 - (Accepted) DeepVulSeeker: A Novel Vulnerability Identification Framework via Code Graph Structure and Pre-training Mechanism
 - (Under Review) JFinder: A Novel Architecture for Java Vulnerability Identification Based Quad Self-Attention and Pre-training Mechanism

Internship And Projects

MIT 6.824 | Distributed Systems

May 2023 - Persent

> I am currently studying an open course on distributed systems to complement my previous knowledge due to my interest in differential privacy technology. At the moment I am trying to implement the KV store framework which is based on the Raft consensus algorithm.

Canway Technology, Backend Intern

Mar. 2023 - May 2023

> Participated in the development of a multi-cloud collaboration project between CHINA LIFE (Overseas) and CDFG. I was mainly responsible for the design and implementation of backend APIs for the interface with cloud resources from different providers. The project passed testing and was deployed to production.

GDUFE Library | Digital Resource Service, Backend Dev & Server Ops

Sep. 2022 - Feb. 2023

> I was independently responsible for developing the backend interface for Digital Resource Services using Flask and implementing ELK for log parsing. At the same time, I was also responsible for the deployment and monitoring of the project. The project is currently in its final testing phase.

Honors and Awards

- > Ag Medal China Collegiate Programming Contest, Guangdong Province
- > Cu Medal China Collegiate Programming Contest, Guangzhou Site, and ACM-ICPC, Xi'an Site
- > Individual National Second Prize, Team Silver Prize GPLT
- > Individual National Second Prize Professional Software Engineering, Lan Qiao Cup

Experiences

- > I was the leader of t ACM Programming Association and a student coach, managing the school's competition team. (2021-2022)
- > I am passionate about open source and writing. I have contributed to the NOJ (Nanjing University of Posts and Telecommunications OnlineJudge) deployment documentation and often share my insights on my personal blog/Zhihu. Currently, the total word count is over 100,000.

Skills and Interests

Programming: Python, C, C++, Java, Golang

Tools: LATEX, Git, Docker, ESXi, Joern, Tree-Sitter, Flask, Django

Languages: Mandarin(Native), Cantonese(Native)