CHENG-CHIEH (JACK) LIN

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EDUCATION

University of Southern California

Master of Science in Computer Science

Los Angeles, CA

Taipei, Taiwan

Expected May 2026

National Cheng Kung University

Tainan, Taiwan

Bachelor of Science in Computer Science and Information Engineering — GPA 4.0/4.3

Sept 2018 - June 2022

EXPERIENCE

CyberSoft Digital Services Corp.

Backend Engineer

June 2022 - Apr 2024

- Developed Got-Your-Point, a points marketing system that uses blockchain and cloud-native technology to carry out real-time point transactions, serving 1,500+ small businesses.
- Performed system design for in-app subscription flows for Android and iOS, integrating in-app purchases into pre-existing payment methods like credit cards and ATM transfers. Tripled the number of paying users.
- Developed EventHub, a platform for smart decision-making that achieves marketing automation by processing over 1M+ transactional messages daily.
- Implemented and managed SaaS infrastructure on Microsoft Azure using Ansible, Jenkins, and Terraform. Monitored 4M+ of daily SaaS logs and managed alerts using the ELK stack.

NTU Consensus Labs

Taipei, Taiwan

Researcher

Jan 2023 - June 2024

• Conducted research on security issues in DeFi and DAO, analyzing 50+ post-mortems to identify attack vectors and suggest countermeasures. Evaluated the effectiveness of 19 open-source tools in detecting real-world vulnerabilities. Finalized the research into 2 publications at IEEE conferences.

PROJECTS

Fibdry - Linux Kernel Module for Fibonacci Sequence

Mar 2022 - May 2022

- Developed a character device for calculating the Fibonacci sequence, capable of computing up to F_{188795} .
- Implemented Fast-Doubling to minimize computations. In the performance evaluation, it took 1.8ms to calculate F_{50000} using the Schönhage-Strassen algorithm, 45ms to use the Karatsuba algorithm, and 200ms to use addition.
- Utilized the math relationship between the Fibonacci sequence and the golden ratio to implement in-place memory allocation.

Organization Owner for tldr-pages/tldr

Aug 2021 - present

- Co-lead the project with organization members and jointly reviewed 1,000+ pull requests.
- Improve the maintenance workflow and assist new contributors in participating in the project.

PUBLICATIONS

- C. Lin, C. Tsai, and S. Liao, "Incident Analysis of Decentralized Finance," in 2024 IEEE International Conference on Blockchain and Cryptocurrency, Dublin, Ireland, pp. 413-415.
- C. Tsai, C. Lin and S. Liao, "Unveiling Vulnerabilities in DAO: A Comprehensive Security Analysis and Protective Framework," in 2023 IEEE International Conference on Blockchain, Danzhou, China, pp. 151-158.

SKILLS

Languages Framework C, C++, C#, Python, JavaScript, HTML, SQL, Go

Tools

ASP.NET, Vue.is, Linux Kernel Module, Qt, FreeRTOS, Unity, MPI Docker, Ansible, Jenkins, Terraform, Nginx, ELK Stack, Microsoft Azure