

# CHENG-CHIEH (JACK) LIN

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## EXPERIENCES

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### CyberSoft Digital Services Corp.

Taipei, Taiwan

Backend Engineer - Digital Innovation Department

June 2022 - Apr 2024

CyberSoft is the largest payment system provider in Taiwan. The company's credit card issuance system, CyberCARD, has been adopted by 10+ banks (35% market share). Digital Innovation Department was founded in 2015 with 30 members to explore new opportunities in Fintech.

- 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.
- Architected the API and system backend for a social media-based Got-Your-Point interface on the LINE messaging app. Led two new team members to build the application.
- Architected in-app subscription system 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.
- Monitored 4M+ of daily logs using the Elasticsearch Stack, configured ElastAlert rules to send alerts to Microsoft Teams automatically. Configured CI/CD pipeline to automate deployment.
- Revamped unit/regression tests, adding 100+ NUnit and TestRail tests and resolving errors from obsolete logic.

### NTU Consensus Labs

Taipei, Taiwan

Research Assistant - Web3 Security

Jan 2023 - June 2024

- Conducted research on security issues in DeFi, analyzing 50+ post-mortems to identify attack vectors and suggest countermeasures. Evaluated the effectiveness of 19 open-source tools in detecting real-world vulnerabilities.
- Published 2 papers at IEEE conferences:
  - C. Lin, C. Tsai, and S. Liao, "Incident Analysis of Decentralized Finance," in 2024 IEEE International Conference on Blockchain and Cryptocurrency, Dublin, Ireland
  - 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

## EDUCATION

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### University of Southern California

Los Angeles, CA

M.S. in Computer Science

Expected May 2026

Analysis of Algorithms, Web Technologies

### National Cheng Kung University

Tainan, Taiwan

B.S. in Computer Science and Information Engineering - GPA 4.0/4.3

Sept 2018 - June 2022

Operating Systems (98/A+), Compiler Construction (97/A+), Parallel Programming in C for Multiprocessor (95/A+)

## PROJECTS

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### Open Source tldr-pages/tldr Organization Owner

Aug 2021 - present

A user-friendly help page for command-line tools as an alternative to traditional manual pages.

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

### Fibdrv - Linux Kernel Module for Fibonacci Sequence

Mar 2022 - May 2022

- Implemented Fast-Doubling to minimize computations. The implementation clocked 1.8ms and 45ms to calculate  $F_{50000}$  using Schönhage-Strassen and Karatsuba algorithms respectively in performance evaluation.

## SKILLS

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### Programming

C, C++, C#, Python, JavaScript, HTML, SQL, Java, Go, Verilog

### Frameworks

ASP.NET, NUnit, Vue.js, Linux Kernel Module, Qt, FreeRTOS, OpenCV, Unity, MPI, Flutter

### Tools

Docker, Ansible, Jenkins, Terraform, Git, Nginx, Elasticsearch Stack, Microsoft Azure