

CHENG-CHIEH (JAY) HUNG

Seattle, Washington

☎ (626)879-1110 ✉ jaychung025877@gmail.com  

Education

Northeastern University | GPA: 4.0/4.0

Master of Science in Computer Science

Sep. 2024 – May 2026

Seattle, WA

ChengChi University

Bachelor of Science in Computer Science

Sep. 2019 – May 2023

Taipei, Taiwan

Experience

GoFreight

Feb 2024 – August 2024

Software Engineer | Docker, Kubernetes, AWS, PostgreSQL, CI/CD

Taipei, Taiwan

- Developed a scalable real-time monitoring system for 200,000+ shipments, using **Python**, **Django**, and **Docker**.
- Redesigned **PostgreSQL** architecture for the monitoring system, accelerating service performance by 80%.
- Implemented distributed load balancing with **Docker** and **Kubernetes**, integrating **AWS EC2** and **S3**, reducing infrastructure costs by 40%.
- Integrated crawlers with **Apache Airflow**, enabling scheduled execution and automatic failure recovery.

GoFreight

Jul 2022 – August 2023

Software Engineer Intern | Testing, Machine Learning, RESTful APIs

Taipei, Taiwan

- Implemented unit tests with **Pytest**, achieving 80% test coverage.
- Led a **Machine Learning** project using historical shipment data to predict ETA, delivering a new feature to clients.
- Built and optimized **RESTful APIs** with Django, secured with **JWT authentication**, and integrated with **MySQL**.

Appar Technologies

Sep 2019 – Sep 2020

Software Engineer Intern | React, Mobile App Development

Taipei, Taiwan

- Developed a cross-platform exam system using **React Native**, enabling seamless user experience across devices.
- Deployed the application on **iOS** and **Android**, serving 500+ students and improving accessibility to digital exams.

Projects

Real-Time Screen Monitoring and Discord Alert System | *OpenCV, Automation*

- Built a real-time screen monitoring tool using **OpenCV** for grayscale conversion, **Shannon entropy** for anomaly detection, and optical flow for motion estimation.
- Implemented a **Discord webhook** alert system with rate limiting, ensuring accurate and timely notifications.

Authentication System with Secure Key Management | *MERN Stack, Security, Blockchain*

- Developed a full-stack authentication system using the **MERN stack** (MongoDB, Express.js, React, Node.js) with secure key management for encrypted user authentication.
- Designed a scalable **MongoDB** schema for storing authentication data.

Automated Web Clipping Chrome Extension | *React, JavaScript, Chrome Extensions*

- Developed a Google Chrome extension for web element clipping, reducing manual data collection time by 50%.
- Optimized DOM parsing and event handling, increasing Customer Success team productivity by 50%.

Technical Skills

Related Courses: Data Structures, Algorithms, Database Management, Machine Learning, Web Development, Artificial Intelligence, Computer Architecture, Software Methodology, Agile

Programming Languages: Python, JavaScript, TypeScript, C++, Java, Go, Solidity, SQL, HTML, CSS

Frameworks & Libraries: React, Next.js, Express.js, Vue, Spring Boot

Cloud & DevOps: AWS, Microsoft Azure, Docker, Kubernetes, Jenkins

Services: PostgreSQL, MySQL, MongoDB, Redis, RabbitMQ

Machine Learning: scikit-learn, PyTorch, TensorFlow, XGBoost

Testing & Tools: Git, Postman, Pytest, JUnit, Jira, Mocha