

Chan-Yen Hsiung

+1(765)409-4552 | chanyenhsiung@gmail.com | [LinkedIn](#) | [GitHub](#)

EDUCATION

Purdue University, West Lafayette, USA
Master of Science in Business Analytics and Information Management

Aug 2024 – Aug 2025

National Central University, Taoyuan, Taiwan
Bachelor of Communication Engineering

Sept 2016 – Jun 2019

WORK EXPERIENCES

Academia Sinica, Taipei, Taiwan
Software Developer Research Assistant

Jul 2021 – Jun 2024

- Built a real-time end-to-end encrypted messaging platform with **React**, **Redux**, and **Realm**, securing sensitive internal communication across the organization.
- Constructed the Windows, Mac, and website version of the encryption system by **Electron**, optimizing the codebase and reducing the overall system size by 67%.
- Developed an admin system with **GraphQL** querying MongoDB, streamlining data access and operations.
- Enforced team-wide code quality by configuring **ESLint** & **Prettier** and refactoring the React codebase to use **CSS Modules** and **SASS**, reducing lint errors by 80% and bundle size by 20%.
- Built an online calendar system for the internal team using **Node.js** and **MongoDB**, streamlining scheduling processes and enhancing team collaboration efficiency.

Compal, Taipei, Taiwan
Software Engineer

Nov 2019 – Jul 2021

- Designed and executed server stress testing scenarios using **Apache JMeter**, simulating high-concurrency user traffic to evaluate system stability and performance under load.
- Containerized the testing environment with **Docker** and deployed on **Kubernetes** clusters to ensure scalable and reproducible test executions in **CI/CD** pipelines.
- Identified system bottlenecks and collaborated with backend engineers to optimize server performance, achieving 2x improvement in throughput.
- Automated the testing pipeline, reducing manual effort and increasing test efficiency by over 50%, while ensuring more consistent and reliable test results.

INTERNSHIP EXPERIENCE

Toast Beans, California, USA
Full Stack Developer

- Built a stock analysis site using **Firebase** auth and real-time storage, enabling dynamic data visualization.
- Deployed the frontend to **AWS** using **S3** and **CloudFront**, boosting performance and reliability.

PROJECT

AI Slide Generation Tool

- Developed an AI-powered tool that extracts key content and images from Word documents using OpenAI APIs, and automatically generates PowerPoint slides, streamlining the presentation creation process.

TECHNICAL SKILLS

Languages: JavaScript, Node.js, Python, Java, C, MATLAB

Frameworks/Libraries/Tools: React, Redux, GraphQL, Electron, Webpack, Babel, WebRTC, Janus, RESTful, Git, Docker, Kubernetes, Flask, OpenAI, Langchain

Cloud/ Database: MongoDB , AWS, Google Cloud, Microsoft Azure, Realm, MySQL