



# **Experienced Skills**

Cloud Platform VPSs, Oracle Cloud, AWS/Azure/GCP, Fly.io DevOps Container, Jenkins, Git

Framework SpringBoot, Django, Pact, RabbitMQ, Kafka, etc. Database MongoDB, MariaDB, MySQL, Redis, PostgreSQL

**Programming** Java, Golang, Python, Shell, C, JavaScript, Solidity SOA Postman, SideeX, Insomnia, Junit

Operation System Various Linux-distro, MacOS, Esxi, Unraid, TrueNAS Language Chinese, Taiwanese English (CEFR B1)

Misc IOS/Android/IoT/Embedded developing, Network/Homelab/NAS

Education

# Computer Science and Engineering, National Taiwan Ocean University

Design, ITU Amateur Radio Operator Class 3

Keelung, Taiwan

Sep, 2016 - Aug, 2022 M.S./B.S degree

 Programing coursework: Algorithm & Data Structures, ML/DL, NLP, IoT, Network, Information Retrieval, Software Engineering (Cert.), iOS/Android developing, Software Project Management, etc.

• Leading and managing several team projects to achieve the goal on time, achieving positive reviews in the most courses.

# Projects & Publications

## **Composite Contract Testing Service**

· CCTS is a testing service with the goal of minimizing the tester loading cost in Event-driven system testing. With combining logs and State Model to determine the behavior in target system.

• It's validated to measure the performance and the result shows the CCTS does detect the potential executing failures and some common errors while testing.

• Tech stack: SpringBoot, MongoDB, RabbitMQ, Pact, Microservices, Container, shell, etc.

L.O.C. 8k+

· Publications:

29th Asia-Pacific Software Engineering Conference, APSEC 2022 Best Paper, 18th Taiwan Conference on Software Engineering, TCSE 2022

Virtual, Japan Dec. 2022 Taipei, Taiwan Jun. 2022

### Personal Data Authorization System & Personal Data Valuation and Payment System.

· For solving the authorization and valuation issues from sharing of mechanism with Green Button (U.S. digital energy data sharing standard). This provide a trust mechanism to ensure the legality and security of personal data and a thrid-party finance service for end-users to sell their data and withdraw from platform. This is designed with event-driven microservice to improve reliability and throughput. My contributions are in logging, payment, blockchain and third-party fintech.

· Delivering whole solution including source product, deploying, CI/CD chain, infrastructure and manual to our customer on Azure Kubernetes Service. The tech stack is involving Springboot, Angular, Vue, Sideex, Node.js, express, MongoDB, k8s, Jenkins, Citizen Digital Certificate (IC-card), etc. L.O.C. 40k+

· Publications:

2021 National Computer Symposium, NCS 2021 2020 International Computer Symposium, ICS 2020 Taichung, Taiwan Dec. 2021 Tainan, Taiwan Dec. 2020

# Pull Request, flipperdevices/flipperzero-firmware in Github

11.8K starts

- This is an popular open-source multi-tool embedded device with RFID, NFC, GPIO and sub-GHZ radio support to let user construct their own creative scenario.
- · Correcting the command and instruction fail in firmware building progress. Accepted changes by core team member.

### HomeLab

HW/SW Integrity

### HideReplier • An containerized, cloud-powered and automatic bot to

Spring/DC bot

- Compute and Storage Separation. Integrated by virtual machine and container with high availability.
- Integrating 30+ services including private cloud storage, DNS, monitoring, multimedia service, cross-platform album, Home Automation, etc.
- Flex & Reliable Software Defined Network.

# Work Experience

Intern of Software Engineer, Industrial Technology Research Institute (ITRI) Hsinchu, Taiwan Jul. 2021 - Dec. 2021

· Researching, designing, and building a personal data authorization system with reliability and throughput. Including decentralized, micro-service, Event-driven Architecture, CI/CD chain, security, block-chain and third-party finance system. Collaborating and deliver two projects, several tasks in time with whole tool-chain and documents.

#### MIS, Ming-Chyuan Ltd. Tainan, Taiwan Jul. 2012 - present

- To solve the manufacturing problems in factory of CNC.
- · Improving and maintaining the digital system from legacy products to modern architecture solution. Up to 99% Availability.

# Teaching Assistant, National Taiwan Ocean University

dealt with anonymous content publish issue in Public

university, managing over 3.5+ messages to date.

discord server. A personal side project for classmates in

- To help University escalate legacy content to new content management system and realize assigned customization with requirements.
- Help professors to design and arrange the lessons.

CHUFEI WU · RÉSUMÉ