

## **Experienced Skills**

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

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

Programming Java, Python, Shell, C, JavaScript, Solidity SQA Postman, SideeX, Insomnia, Junit

**Operation System** Various Linux-distro, Mac OS, Esxi, Unraid, TrueNAS

Misc IOS/Android/IoT/Embedded developing, Language Chinese/Taiwanese, English (CEFR B1)

Network/Homelab/NAS Design, ITU

Amateur Radio Operator Class 3

### Education

#### Computer Science and Engineering, National Taiwan Ocean University

Keelung, Taiwan

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

- 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.

- CCTS combines logs and State model to determine the target system behavior. In order to remain the flexibility of data structure. We use MongoDB as the data persistence solution because the plenty resources and widely used.
- It's validated to measure the performance and the result shows the CCTS does detects 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.

- The systems is constructed for solving the authorization and valuation issues from sharing of mechanism with Green Button (U.S. digital energy data sharing standard) by laboratory and ITRI.
- The systems 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 distributed system is designed with event-driven microservice to improve reliability and throughput.
- 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

8.9K 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

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.
- An containerized, cloud-powered and automatic bot to dealt with anonymous content publish issue in Public discord server.
- It's personal side project for classmates in university, managing over 3.5+ messages to date.

# 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.

CHUFEI WU · RÉSUMÉ