ChuFei Wu

SOFTWARE ENGINEER · WEB SERVICE DEVELOPER

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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, Golang, 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, Network/Homelab/NAS Design, ITU Amateur Radio Operator Class 3	**Language**	Chinese/Taiwanese, English (CEFR B1)

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 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   *Virtual, Japan* Dec. 2022
  Best Paper, 18th Taiwan Conference on Software Engineering, TCSE 2022   *Taipei, Taiwan* Jun. 2022

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

- The systems are 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. My contribution is 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   *Taichung, Taiwan* Dec. 2021
  2020 International Computer Symposium, ICS 2020   *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

- 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.

HideReplier   DC bot

- 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.