

WenChih Lo

SOFTWARE ENGINEER

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Summary

Current software engineer at Chunghwa Telecom and committer at Apache Software Foundation. Have 3+ years experience specializing in web development and open-source technology. I love learning something new and keen on contributing to open-source softwares. Interested in Big Data, Distributed Systems, Machine Learning and MLOps. Right now, I am learning about Java (Spring), Go, public cloud service (Azure), Docker, Kubernetes ecosystem and ML systems.

Education

National Cheng Kung University

M.S. IN COMPUTER SCIENCE AND INFORMATION ENGINEERING

Tainan, Taiwan

Sept. 2019 - Aug. 2021

- Distributed System Lab, Thesis advisor: Prof. Hung-Chang Hsiao, GPA: 3.88/4.0
- Thesis title: Enabling Artifact Storage in Machine Learning Pipelines to Boot System-Wide Performance: The Case of Apache Submarine

Tamkang University

B.S. IN COMPUTER SCIENCE AND INFORMATION ENGINEERING

New Taipei, Taiwan

Sept. 2012 - Jun. 2016

- Senior project: A trip planning APP, Advisor: Prof. Chien-Chang Chen

Skills

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|-----------------------|---|
| Languages | Java, Go, Python, JavaScript |
| Back-End | Spring Boot, Jersey, MyBatis, Traefik, FastAPI, SQLAlchemy, REST API and DB schema design |
| Front-End | HTML5, jQuery, AJAX, Bootstrap |
| Data Storage | MySQL, MS SQL server, Redis, MinIO |
| SDLC | Github, Shell scripts, JUnit, Ginkgo, Maven, Argo workflow, Helm, Ansible, Jira |
| Public Cloud | AWS (EC2, S3), Azure |
| Resource Mgt. | Kubernetes, Hadoop YARN |
| Virtualization | Docker |

Professional Experience

Chunghwa Telecom Co., Ltd.

SOFTWARE ENGINEER

Taipei, Taiwan

Sept. 2021 - Present

- Designed REST APIs integrated with Google third-party APIs to resell Google Workspace. [Go, Google APIs]
- Working on processing telemetry data and sending events to Azure Event Hubs. [Java (Spring boot), Azure, Multithreading]
- Working on developing a containerized backend service including REST API and DB schema design to manage devices, cables and patch panels. [Python (FastAPI), MySQL, Docker]

Shop123 Network Technology Inc.

SOFTWARE ENGINEER

Taipei, Taiwan

Jun. 2018 - Oct. 2018

- Mainly responsible for developing backend services for a platform which allows users to build an online store with ease.
- Implemented factory method pattern for creating widgets which rendering inconcrete view objects. [HTML, JavaScript, Bootstrap]
- Designed database schema and REST APIs for content management module. [PHP (yii), MariaDB]

SunFun Info Co., Ltd.

WEB DEVELOPER

Taipei, Taiwan

Jul. 2016 - May. 2018

- Developed a matchmaking web application and implemented Gale-Shapley algorithm to resolve Stable Marriage Problem.
- Implemented the online payment service with E.SUN BANK cash management service (e-Collection) to receive payments.
- Integrated Google Calendar, URL shorten APIs for activity sign-up and Facebook Graph API for member registration.

Projects

Apache Software Foundation, YuniKorn

CONTRIBUTOR

Dec. 2021 - Present

- YuniKorn is a standalone resource scheduler for K8s, that empowers to run large-scale batch jobs and services on a multi-tenancy K8s cluster. I added e2e test for admission controller to increase test coverage. Now I am working on some issues about improving the stability for YuniKorn scheduler.

Apache Software Foundation, Submarine

COMMITTER

Oct. 2020 - Present

- Enabled Submarine to run distributed MXNet jobs on Hadoop YARN via an open-source project called TonY. [Java, Hadoop]
- Integrated Jupyter notebook into Submarine on K8s and enabled users to manage their own notebook instances via REST APIs. [Jersey, Jupyter Notebook, Helm, K8s, MySQL]
- Deployed Traefik ingress controller on K8s cluster to manage external access to the services in Submarine. [K8s, Traefik, Helm]
- Analyzed the demand of data scientists on Machine Learning pipelines. [Airflow, Argo workflow, MinIO]

Presentation

Conference for Open Source Coders, Users and Promoters, COSCUP

[Online](#)

PRESENTER FOR <INTRODUCTION TO APACHE SUBMARINE>

Aug. 2021

- Introduced to MLOps and the difference between DevOps.
- Introduced to Apache Submarine which is a cloud-native ML platform makes data scientists focus on models and run ML workloads easily in distributed environment.