Jetnipit Kulrativid

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Summary

I am a software engineer with years of experience in cloud infrastructure, software engineering and containerized technology. I am highly enthusiastic about large-scale cloud infrastructure and believe that well-structured cloud infrastructure will unlock more unimaginable business opportunities.

Education

Chulalongkorn University

B.Eng. in Computer Engineering (fourth year student)
GPA 3.64

Key Qualifications

Cloud Infrastructure Veteran
Robust **API Development** Background
Basic **Network** Configuration
Distributed System with **Kubernetes**

Experience

Software Developer Intern at **Chula UTC**

Mar. 2022 – Aug. 2022

- Developed backend service of DMIND application with **Golang** which **making the app more lightweight** than other popular languages
- Made application deployment less prone to bug and time-consuming by containerizing the application with **Docker**
- Speeded up APIs response time by **caching** static content such as videos into Redis
- Estimated request capacity of the app and detected memory leakage by **load-testing** with Locust.
- **Reached 100k** of analytic records being used for training depression detection AI
- DMIND was one of the **Thailand's representatives at i-CREATe 2022** in Hong Kong
- Rewrite backend service of MoCA application, fully automated dementia test app, with **clean architecture**, making the code more maintainable
- Greatly improved database query performance of unstructured test results via **migrating database** from SQL-based MariaDB to documented-based MongoDB
- Since 2022, MoCA has been **used by Cognitive Fitness Center at Chulalongkorn Hospital**

Due to success of DMIND and MoCA, our team **successfully spun off a new startup company**, **AIMET**.

Part-time Software Developer at **Agnos Health**

Sep. 2022 – Feb. 2023

- Implemented new features on Agnos application Backend with **Python** and used **PostgreSQL** as database.
- **Helped business team** automatically **scrape clinics** in Thailand via Google Map APIs.
- Developed the backend for the **clinic recommendation feature**, enabling the Agnos app to search for clinics associated with diagnosis results and located near your GPS location.
- Developed an **automated data reader from Excel to SQL database**, offering a direct way for the business team to update the clinic list.
- Created dashboards for the business team to **visualize user behavior** using analytical data stored in PostgreSQL **via complex SQL queries**.

Project and Participation

Distributed System on Raspberry Pi (ongoing)

The project's objective is to establish a **Kubernetes cluster** using a set of Raspberry Pi Pico devices with two laptops functioning as master nodes. Subsequently, the project aims to deploy a sample microservices application within this Kubernetes environment. The goal is to ensure fault tolerance, allowing each service to automatically restart in the event of a node failure. This project is a part of the **Software-defined System** final project.

CU Task Overflow Web via Kubernetes

Our team worked as a **Scrum** team and architected **microservice** with **Domain-driven design**. My responsibilities included implementing a **load balancer** and setting up **service discovery** through **Kubernetes** and **Nginx Controller**. You can access the project's source code here.

Communication

Proficient at an **intermediate level in English**, as it is a part of my daily life, including activities such as studying MIT Open Courseware and reading InfoQ articles. Experienced in working with both **waterfall** and **agile** methodologies.