## **Robert Chu**

(+886) 972435608

juroberttyb@gmail.com





I possess a valid working visa to work in Canada

#### Summary

Hi, I'm Robert, a passionate back-end developer with expertise in REST design and experience in DevOps using Docker, Kubernetes, and GCP (Google Cloud Platform).

In my free time, I am diligently building iOS mobile apps and aim to start a startup one day.

### **Experience**

### Backend Developer, Oisee, Backend Team

Apr 2022 - Present

- Design and develop CRUD operations, microservices, and other backend services for Apen, Phar, NStation, Clos, and MediTalk
- Parallelize 92% of the notification API with multithreading using Go routines and speed up data processing time by 1.62 times
- Design and develop redis caching into existing backend services and speed up http responses by 8.96 times
- Write unit and integration tests to raise the test coverage of the API package from 0% to 91%
- Refactor 97% of backend code to follow API/Service/Gateway/Store/Model best-practice architecture
- Integrate Google Cloud Logging to raise the logging coverage of backend code from 61% to 96%
- Integrate Google Cloud Pub/Sub into Purchase API with Go channels and context
- Reduce 74% of GCP network and storage billing costs by introducing Cloud CDN to our backend services
- Implement CICD pipelines for backend services to automate testing and deployment processes
- · Provision and maintain microservices, storage, SSL certificates, and DNS records on the GCP Cloud
- Decouple existing services with RabbitMQ and gRPC by introducing a loosely coupled architecture to our backend to accelerate response by 13% and reduce code size by 32%

#### Machine Learning Engineer, Gallopwave, Deep Learning Team

Aug 2021 - Apr 2022

- Design and develop a distributed architecture to speed up the training pipeline by 3.89 times
- Design and develop image segmentation and object detection features for autonomous driving
- Develop tools for testing object detection models and raise the test coverage from 37% to 85%
- Develop and maintain data generators for 93% of training pipelines
- Develop and maintain ONNX generation pipelines for 81% of production platforms
- Develop and integrate weather transformation for data augmentation using Cycle GAN
- Automate 77% of infrastructure build-outs for development environments
- · Troubleshooting network, linux, and docker issues for development and production environments

# Algorithm Intern, RogersAI, Algorithm Team

Jul 2020 - Aug 2020

## Education

# M.S., National Tsing Hua University, Computer Science

2019 - 2021

- The master's thesis was accepted at the AAAI Workshop and is cited in six other papers
- B.S., National Taiwan Ocean University, Computer Science and Engineering

2015 - 2019

## **Projects**

KeyWithin website: The official website of the KeyWithin iOS app is built with React.js, Express.js, MongoDB, and GCP.

## Skills

Backend	DevOps	Others
Go / Python / Rust REST / gRPC / Microservices PostgreSQL / MongoDB / Redis RabbitMQ / Google PubSub Storage / Logging / Cache	GCP (Google Cloud Platform) Linux / Docker / Kubernetes CDN (Content Delivery Network) CICD / Github Action	Swift / SwiftUI Sklearn / OpenCV / Pytorch