Aaron Pham

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Education

McMaster University
Expected Grad: 04/2025

Bachelor of Engineering and Management Software Engineering Co-op.
Extracurricular: Website Admin at Software Engineering Society, Mentor at McMaster Climbing Club

Experience

BentoML
MLH Fellowship
09/2020-12/2020

Wrote a gRPC metrics exporter and added Prometheus support for YataiService, BentoML's model deployment server. Created a mock gRPC test service that can be used for future testing, unit tests with Pytest that have **86%** coverage.

Added GPU supports for BentoML's model server docker images, enables users to serve with GPU.

Selected as one of **80** fellows to be part of MLH Fellowship Open Source Batch 1.

Technologies: Python, Pytest, Prometheus, Docker, TypeScript

Software Engineer
01/2021-04/2021
04/2021-Present

Added a Docker image releases management, provides supports for multiple Linux OS. Implemented and provided passthrough supports for every major ML frameworks. Propsed and designed a easy-to-use CI system, allowing developers to quickly add and setup CI workflow with GitHub Action.
Working on supporting strict type checking with Pyright for the codebase. Provided supports for label creation implementation in Golang and mentored Fall 2021 Batch MLH Fellows working on Yatai, which runs BentoML on Kubernetes.
Technologies: Python, Pyright, Docker, GitHub Action, Bash, Golang, AWS EC2

Ann Lee Consulting
Software Engineer
04/2021-09/2021
Contractor

Maintaining a student and admin site for student management to relieve dependences on manual work. Current stacks implements a Go authproxy, Rust backend and React frontend. Added view modal functionality supports for React.

Technologies: React, Go, MongoDB, Rust

Luxcer
Software Engineer
03/2021-06/2021

Designed a code lookup service API for medicaid services, then deployed to AWS EC2.

Technologies: Python, Docker, FastAPI, SQLAlchemy, AWS S2

Project

onw
github

A real-time navigation tool that harnesses the power of community to make community safer.

Implemented **Gaussian Mixture Model** to find the safest path between different locations, trained on past assault data provided by Toronto Police Department from 2015 onwards.

Integrated with Google Maps API to show heatmaps of avoided zone.

Implemented frontend features from Figma in **React Native** and **Expo**, shipped with AWS Fargate

Awarded: Finalists at Hack the North 2021.

Technologies: AWS, React Native, TypeScript, GraphQL, Apache Spark MLlib

dha-ps
github
swe @gpayvn
06/2020-12/2020

Designed and created a product-based price recommender API.

Implemented and trained a custom *BERT* model for sentence similarity in PyTorch, then served via FastAPI framework.

Built a dockerized Go microservices infrastructure and deployed via Kubernetes.

Wrote unit test for both Go and Python backend.

Technologies: Python, Go, Kubernetes, Docker, PyTorch, Google Cloud Platform