

Ray Liu

SOFTWARE ENGINEERING | DEVELOPER

Toronto, Canada

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Skills

Language Python · Java · SQL · Go · Javascript · HTML/CSS

Frameworks Spring Boot · Ruby on Rails · Django · Express.js

Tools and Others Git · GraphQL · Docker · Kubernetes · GCP · Node.js · jquery · PostgreSQL

Experience

Tesla

Palo Alto, California

INCOMING SOFTWARE ENGINEER INTERN (BACKEND/DATA SCIENCE ON ENERGY PRODUCTS TEAM)

Sept 2019 - Dec 2019

- Will develop **Python/Scala** application for monitoring and diagnosing issues with Supercharger products
- Will implement new detection methods using pattern recognition of telemetry data from each device
- Will analyze fleet-wide Supercharger telemetry data to understand overall system performance and to look for areas of improvements utilizing various data science techniques

Publicis.Sapient (Publicis Groupe)

Toronto, Canada

SOFTWARE ENGINEER INTERN

June 2019 - Aug 2019

- Designed and led a group of interns to develop a real-time ML anomaly detection microservice for Publicis Sapient NY Financial Services to process more than 2 billion transactions per day using **Python, Flask, Docker, Kubernetes, and GCP**
- Designed, implemented and optimized various microservices for **KPMG** using **Java, Spring Boot, and SAP Gigya**

Jumpstart

San Francisco, California

GROWTH MARKETING INTERN (STUDENT AMBASSADOR)

Mar 2019 - Present

- Selected from a pool of thousands of candidates to work closely with the Jumpstart team to build out an ML recruiting platform
- Piloted new features, provided student feedback, and acted as a product advisor on campus

TISC Ltd.

Tainan, Taiwan

SOFTWARE ENGINEER INTERN

May 2018 - Oct 2018

- Designed and implemented an application for the AERMOD software (By EPA) using **Python** that allows users to simulate dispersion of air pollutant emissions from stationary industrial sources with Google Earth

Projects

HeyTensor

HTTPS://HEYTENSOR.HEROKUAPP.COM

2019

- Developed an ML web application with **Node.js, Express.js** and **socket.io** that provides users a chatbot for mimics conversational behaviours
- Trained model based on massive dataset from online forum (Reddit) comments with **Python, SQL** and **Open source machine learning libraries**

Say-gRPC

HTTPS://GITHUB.COM/CHERAYLIU/SAY-GRPC

2019

- Developed a text to speech server with **Go, gRPC, Protocol Buffers** and flite (Open source text to speech synthesis engine). Deployed as a **Docker** application to **Google Container Engine** with **Kubernetes**

QuickShop

HTTPS://GITHUB.COM/CHERAYLIU/QUICKSHOP

2019

- Developed a **GraphQL API** using **Ruby on Rails** with **PostgreSQL** that allows users to access and manipulate product data through queries and mutations to perform actions on product inventory

Greco (RU Hacks)

HTTPS://GRECO.TECH 2018

2018

- Developed a web application that allows user to rate location and create a visual 'cleanliness' overlay of their local surroundings by using **Python, Django, Javascript** and **SQLite**

Education

McMaster University

Hamilton, ON, Canada

B.ENG IN SOFTWARE ENGINEERING (3RD YEAR)

Sept 2016 - April 2021

- GPA: 3.7 | Dean's honour list
- Relevant Courses: Data Structures and Algorithms, Software Design I/II, Databases, Software Architecture