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 - Dev 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

Greeco (RU Hacks)

https://greeco.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