

# Ray Liu

Palo Alto, California

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## Skills

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**Languages** 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

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### Tesla

*Palo Alto, California*

SOFTWARE ENGINEERING/DATA SCIENCE INTERN (ENERGY PRODUCTS TEAM)

*Sept 2019 - Dec 2019*

- Developing Python/Scala application for monitoring and diagnosing issues with Supercharger products
- Analyzing 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 ENGINEERING INTERN

*June 2019 - Aug 2019*

- Led a group of interns to build a real-time ML anomaly detection microservice to process more than 2 billion stock orders per day using Python, Flask, Docker, Kubernetes and GCP
- Designed and implemented a gated content subscription service to increase user engagement of a big four accounting firm's platform with Java and Spring Boot
- Led system design and project execution for a team project based on business requirements given by key stakeholders
- Managed project updates for key stakeholders by synthesizing information from various cross-functional team members

### Jumpstart

*San Francisco, California*

GROWTH MARKETING INTERN

*Mar 2019 - Present*

- Provided feedback and strategies for product and engineering teams that led to an increase in user acquisition and engagement for Jumpstart's ML recruiting platform
- Conducted user research through leveraging online forums, social media and in person interviews to influence product strategy and direction

### TISC Ltd.

*Tainan, Taiwan*

SOFTWARE ENGINEER INTERN

*May 2018 - Oct 2018*

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

## Projects

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### HeyTensor

[HTTPS://HEYTENSOR.HEROKUAPP.COM](https://heytensor.herokuapp.com)

2019

- Developed an ML chat application that mimics conversational behaviours with Express.js and trained model based on a massive dataset from Reddit with Python, SQL and open source machine learning libraries

### Greco

[HTTPS://GITHUB.COM/CHERAYLIU/GRECO](https://github.com/cherayliu/greco)

2018

- Designed and developed a web application that helps users to create awareness and improve in the cleanliness of their local communities by using Python, Django, Javascript and SQLite

### Say-gRPC

[HTTPS://GITHUB.COM/CHERAYLIU/SAY-GRPC](https://github.com/cherayliu/say-grpc)

2019

- Implemented a text to speech server with Go, gRPC, Protocol Buffers, flite, Kubernetes and GCP

### QuickShop

[HTTPS://GITHUB.COM/CHERAYLIU/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

## Education

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### McMaster University

*Hamilton, Canada*

**B.ENG IN SOFTWARE ENGINEERING | GPA: 3.7**

*Sept 2016 - April 2021*