

# Sam Yu

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## SKILLS

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**Languages:** Python, JavaScript, Java, TypeScript, SQL, C++, HTML, CSS, Bash

**Tools:** React, Node.js, Flask, Django, PostgreSQL, Docker, Kubernetes, AWS, MongoDB, Kafka, Unix

## EXPERIENCE

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**Uber** - Software Engineering Intern, Maps Engineering (Boulder, CO) Sep 2021 – Dec 2021

- Led the design and implementation of an automated map data validation pipeline written in **Java** to increase the reliability of over **30 million navigation requests per day**
- Reduced routing errors **by 10%** by building a system to target incorrect geospatial map data stored in **Apache Thrift** based on the frequency of trips in the area
- Created an **engineering requirements document** for a cross-functional distributed data processing pipeline in collaboration with engineering and product teams

**Wish** - Software Engineering Intern, Data & Relevancy (San Francisco, CA) Jan 2021 – Apr 2021

- Increased **gross merchandise value (GMV) by 10%** through introducing merchant products in the product feed via A/B tests using **Tornado** web server and **MongoDB**
- Implemented data automation pipelines with **Python** to process and optimize over **\$1 billion** of ad spend via **Hive SQL** queries on **Hadoop** data stores
- Improved **return on ad spend (ROAS) by 20%** through migrating **over 10,000** merchants from generic ad campaigns to customized ad campaigns via automated **Python** scripts and **Facebook Graph API**

**Apple** - Software Engineering Intern (Cupertino, CA) Jun 2020 – Aug 2020

- Transformed the analysis of over **\$3 billion dollars** worth of AppleCare cases by developing an interactive data analysis tool using **SQL**, **Pandas**, and **JavaScript Canvas API**
- Increased efficiency of engineering team **by 80%** by designing and implementing an internal collaborative project management tool using **Flask**, **jQuery** and **PostgreSQL**
- Implemented an automatic data delivery pipeline for **over 5 million rows** of CSV data using **Python**, cron jobs via APScheduler, and **PostgreSQL**

**Webveloper** - Software Engineer (San Francisco, CA) Dec 2018 – Aug 2020

- Accelerated site deployment speeds **by 70%** by building customizable **React TypeScript** components and **Express.js** APIs on a **Node.js** server to autonomously generate site demos based on customer input
- Reduced development costs **by over 60%** by designing and implementing tooling for deploying local **Docker** container changes to remote **Kubernetes** clusters hosted on **Google Cloud Platform**

**OnCall Health** - Full Stack Software Engineer, Intern (Toronto, ON) May 2019 – Aug 2019

- Built an analytics dashboard displaying administrative data of **over 30,000** patients with **React** visualizations, **Django** Rest Framework and **PostgreSQL** database queries

## EDUCATION

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**University of Waterloo** - Bachelor of Computer Science (Co-op) Sep 2018 - Apr 2023

Relevant Coursework: Algorithms, Networks, Artificial Intelligence, Big Data, Distributed Computing, Databases