

Alan Wu

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SKILLS

Languages

Golang, Java, Python, Ruby, JavaScript, NodeJS, PHP

DataStores

MySQL, PostgreSQL, Redis, Kafka, Elasticsearch, MongoDB

Frameworks

ReactJS, Java Spring, GraphQL, Ruby on Rails, Flask

Cloud & DevOps

Kubernetes, Linux, Bash, Git, GCP, AWS, Docker, Jenkins, TCP/IP

WORK EXPERIENCE

Software Engineering Intern

Meta (Facebook)

Sept. 2021 - Present
Vancouver, BC

- ❑ Build **collaborative ads** with **Hack** and **ReactJS** to empower brands to run dynamic ads for catalog sales or conversions objectives
- ❑ Developed monitoring of **latency** and **error rate** for **API** and **GraphQL** endpoints and created dashboards and **alerting** through **Python**

Software Engineering Intern

Yahoo

July 2021 - Aug. 2021
Taipei, Taiwan

- ❑ Built global **ad platforms** and **search services** on Yahoo with ML and full stack development in **Java** and **Python**
- ❑ Trained context-aware **NLP** model to serve content recommendations and ads with **Golang** gateway on publishers website

Software Engineering Intern

Tesla

Jan. 2021 - Apr. 2021
Waterloo, ON

- ❑ Built **distributed systems** and **pipelines** for real-time vehicle data streams with **Python** and **AWS** for global fleet metrics analysis
- ❑ Designed and collaborated **cross-team** to develop **Java Spring API** for reliable feature releases and milestone rollouts
- ❑ Developed **Golang microservices** to process metrics from over **1.5 million** vehicles and visualized timeline with **ReactJS** and **D3**

Software Engineering Intern

Apple

June 2020 - Sept. 2020
Vancouver, BC

- ❑ Created **full stack** solution to deliver Apple Maps core services and data to **Kubernetes** clusters and over **2.2 billion** devices
- ❑ Researched and implemented **load balancing algorithm** with **Ruby, Perl, and Nginx** to improve data delivery time by 50%
- ❑ Spearheaded **API** development and **UI design** to reduce 40% of SRE workflows by automating with **JavaScript** and **Rails**

Production Engineering Intern

Shopify

Sept. 2019 - Dec. 2019
Ottawa, ON

- ❑ Engineered tooling and platforms to manage **Kubernetes** on **Google Cloud** with over 80 clusters and 700 deployments
- ❑ Developed jobs to monitor over **400+ SQL** database performance and defined **SLO** to ensure **99% service availability**
- ❑ Improved **fault tolerance** by reducing DNS resolution time by **90%** to reliably handle **180k requests** per second during disruption
- ❑ Built Kubernetes controllers in **Golang** with caching and **multithreading** to manage custom datastores such as **MySQL** and **Redis**

Software Engineering Intern

BlackBerry

Jan. 2019 - May 2019
Waterloo, ON

- ❑ Built **Ruby on Rails microservices** and gather **stakeholders requirements** to provide cloud computing and monitoring services
- ❑ Trained **NLP** models with **91% accuracy** and integrated the **AI chatbot** with APIs to streamline **CI/CD pipeline** and **Agile cycle**

STARTUP

Crypto Arsenal | crypto-arsenal.io

May 2020 - Present

- ❑ **CTO** of a SaaS platform for **1000+ quants** and **traders** to backtest, simulate, and live-trade with **algorithmic quantitative** strategies
- ❑ Designed **NodeJS** and **Python** microservices with **RabbitMQ** messaging, **gRPC**, and **MySQL** to interface with crypto exchanges

EDUCATION

University of Waterloo

Management Engineering | April 2022

- ❑ Cumulative **GPA of 3.70**
- ❑ Algorithms and Data Structures, Software and Database Design, Data Warehousing and Mining, Networking, Optimization Models