

Curtis Chong

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Skills

Languages: Golang · Java · TypeScript · Python · C++

Technologies: SQL · GraphQL · Docker · AWS · Node.js · React

Work Experience

Grammarly

Backend Intern · Grammarly for Businesses Team

Remote

May – Aug 2021

- Developed a Java library to proxy requests through a **Spring API Gateway**, simplifying request authorization.
- Migrated production data while maintaining data consistency and **100% uptime**.
- Scaled **DynamoDB** queries to fetch and sort user Snippets efficiently.
- Polished code by standardizing integration tests, surfacing DynamoDB errors, and simplifying service configs.

BitGo

Backend Intern · Trade Execution Team

Remote

Sept – Dec 2020

- Developed algorithms to detect and correct interrupted trades, expediting client support from **hours to minutes**.
- Leveraged **Protobufs** to snapshot our trading engine's entire state, allowing us to replay and debug client trades.
- Implemented a **Redis cache** to reduce balance fetch calls by **80%**.
- Reduced technical debt in our algorithms, request, and order size logic, simplifying code for other engineers.

BitGo

Backend Intern · Trade Execution Team

San Francisco, CA

Jan – Apr 2020

- Wrote **trading algorithms** (Sweep and TWAP) to place orders across crypto exchanges at the best prices.
- Developed a testing suite that simulates incoming requests and market conditions to ensure engine stability.
- Designed race-free state machines and balance tracking services to ensure stable trades.
- Integrated **Prometheus** metrics into the engine to identify bottlenecks and performance issues.

Kik

Backend Intern · Data Engineering Team

Kitchener, ON

May – Aug 2019

- Built an A/B testing system in **Python** and **Redshift SQL** to segment users by country and visualize results.
- Integrated data from **AWS Kinesis** to quicken spam classification from **5 to 2 minutes**.
- Encapsulated an Airflow job scheduler within **Docker**, allowing engineers to schedule jobs consistently.
- Established a **SQL** testing framework to ensure stability across all data science projects.

Hackathons

First Place at the Fall 2019 YC Hackathon

bit.ly/prj-hyperdoc

- Designed a tool to read and write documentation directly within VSCode, unifying formerly scattered code docs.
- Developed a documentation editor within VSCode that avoids merge conflicts and allows for in-code hyperlinks.

Winner at Hack the North 2019

bit.ly/prj-complete

- Created a **VSCode extension** that assists developers by autogenerating functions from pseudocode.
- Blitzed through the VSCode API docs, then developed the client, middleware, and optimized network requests.

Education

University of Waterloo · Bachelor of Software Engineering Co-op · 3.5 GPA

2018 – 2023

Relevant courses: Operating Systems · Algorithms · Compilers · Software Engineering Principles