songks712@gmail.com + 1 289 383 0726

EDUCATION

University of Waterloo

Sep 2020 - Apr 2025

Bachelor of Software Engineering (BSE) - 4A Term

3.7/4.0 cGPA

 Courses: Software Engineering Principles, Data Structures and Algorithms, Operating Systems, Intro to Database Management, User Interfaces, Computer Networks, Intro to Machine Learning

TECHNICAL SKILLS

Languages | Java, C/C#/C++, Go, Javascript, Typescript, Python3, Kotlin, HTML/CSS, GraphQL

Technologies | REST APIs, gRPC, Spring, React, React Native, NodeJS, ExpressJS, Expo, PyTorch, Svelte, Redux

Databases | MongoDB, Redis, MySQL, Postgres

EXPERIENCE

Stealth Startup

May 2024 - Aug 2024

Software Engineer Intern - Mobile Team

- Optimized venue loading times by 40% by implementing a pre-fetching algorithm using GraphQL and Typescript
- o Designed and developed a high throughput document generating API achieving sub 150ms latency at P99.9
- Built a Native module to enhance application security, successfully achieving compliance with multiple client security standards and requirements

Veeva Systems Jan 2024 - Apr 2024

Software Engineer Intern - Safety Intake Team

- Designed and implemented a multi-threaded, high-performance algorithm in **Java** to parse XML files to database records with a throughput of **300 MBps**
- $\circ\,$ Added support for parsing new Japanese PMDA files and implementing user-facing validation warnings and localizations

Baron Biosystems

May 2023 - Aug 2023

Software Engineer Intern

- Created an efficient event scheduling algorithm using **Svelte**, **WebAssembly**, and **C**++, resulting in a **40**% increase in premium user engagement
- Decreased page loading times by 50% through refactoring heavily outdated code using PHP, Redis, MySQL and MongoDB
- Improved user engagement by 15% by integrating Garmin API to streamline workout exporting and management using PHP, Laravel, Redis, and MySQL

Prodigy Education

Sep 2022 - Dec 2022

Software Engineer Intern - Educators Team

- Reduced GraphQL endpoint latency by 90% through data loaders and batching
- Raised teacher retention rate by 40% as measured by Segment by developing a new onboarding flow in React
- Led a data collection improvement initiative using **Segment**, increased teacher analytics data throughput by 30%
- Boosted teacher activity by 15% by implementing deep link and push notification features in React Native

blueRover
Full Stack Developer

Jan 2022 - Apr 2022

- Scaled monthly report generation data throughput by more than 10x using Javascript and ExpressJS
- \circ Reduced **RESTful API** latency by **70**% and increased report throughput by **40**% by optimizing server-side report generation

PROJECTS

Sundial Dec 2023

- o AI Powered scheduler and calendar generator web app built in Typescript, Go, MySQL
- Leveraged Cohere Command R+ API to parse course syllabi and create appropriate calendar events
- o Built server-side APIs and authentication services using Go