Matthew Hao

✉ m.lgh02@gmail.com   in linkedin.com/in/mlgh   🌐 mlgh.vercel.app   📞 647-621-8968

Skills

Languages: Java, C, C++, Python, JavaScript, Typescript, HTML, CSS, Kotlin, Golang, PHP, SQL

Frameworks and Technologies: Spring Boot, React.js, Next.js, PostgreSQL, MySQL, MS SQL Server

Tools: Git, GitHub, Docker, AWS (S3, EC2), Jenkins, Maven, Linux, Postman

Experience

Immigr8 – *Full Stack Software Engineer*   *Jan 2024 – Apr 2024*
- Led small team in development and drove design decisions to build a modern SaaS U.S. Visa Application platform using **Typescript**, **React.js**, **Next.js**, **Java**, **Spring Boot**, **PostgreSQL**, and **AWS**
- Designed, implemented, and tested over **20** features end-to-end to improve visa application success rate, reduce end-to-end application process time by **40%**, and optimize collaboration between applicants, employers, and attorneys
- Adapted to dynamic customer requirements and fast-paced environment to ensure standards and deadlines were met

PointClickCare – *Software Engineer*   *Jan 2023 – Apr 2023*
- Designed and implemented an API endpoint with dry run functionality for reingestion of a list of patient resources using **Kotlin** and **MS SQL Server**, leading to an over 80**%** reduction in ingestion time of individual patients
- Reworked **SQL** queries to fetch provenance data from **MS SQL Server** and created provenance resources using **Kotlin** including test cases, for over 10 resources, to comply with FHIR standards
- Optimized various **Maven** dependency versioning while maintaining application functionality and performance to resolve over **15 critical, 30 high and 20 moderate** security vulnerabilities

Zynga – *Software Engineer, Core Architecture*   *May 2022 – Aug 2022*
- Prototyped and implemented a code coverage report framework for Storage service using **PHP** as part of service rewrite, identified unnecessary code and improved code quality of rewritten service
- Implemented integration test suite for storage service using **Golang** to validate functionality of rewritten service and increased code coverage by **50%**
- Incorporated MinIo into Dockerized development environment to emulate **AWS S3** functionality and tested archive restoration using the **AWS Golang SDK**

OpenText – *Software Developer, Core Case Management*   *Sept 2021 – Dec 2021*
- Architected, designed, and implemented global dropdown list feature following **Microservices** and **MVC design** patterns using **RESTful APIs** in **Java** with **Spring Boot** and **PostgreSQL,** and tested APIs using **Postman**
- Resolved over a **dozen** user stories and tickets across frontend and backend case management applications involving **Typescript, Java, Spring Boot**

Projects

Personal Website (Link) – *TypeScript, React, Next.js*
- Created a personal portfolio website to highlight my professional experience and showcase my projects

Realtime Operating System Implementation – *C*
- Designed and implemented a multi-tasking kernel with built-in memory allocation, inter-task communication, and console I/O for **ARM** processors in **C**, using a highest-priority scheduling algorithm supporting pre-emption and blocking

Education

University of Waterloo   *April 2025 (Expected)*

Candidate for B.A.Sc in Computer Engineering