GARY LI

+1(416) 988-0768 ⋄ Waterloo, ON

gary.li1@uwaterloo.ca ⋄ linkedin.com/in/gary-li-dev ⋄ garyli.dev ⋄ github.com/garyli2

SKILLS

Languages	JavaScript, Java, TypeScript, SQL, C, Go
Frontend	React, React Native, MUI, MobX, Redux, Cypress
Backend	Spring Boot, Node.js, AWS Lambda, Terraform, PostgreSQL, Hibernate, Docker, Express

EXPERIENCE

Software Developer Co-op   01/2023 - 04/2023
D2L   *Toronto, ON*

- Developed full stack Large Language Model powered projects using **React**, **MUI** and **AWS Lambdas** with automated **Terraform** provisioning on **GitHub Actions**.
- Built OAuth2 compliant **Node.js Lambdas** for **React** frontend to achieve granular user access control.
- Implemented natural language search with serverless **Express** and **OpenSearch** word embeddings on **AWS**.
- Integrated **IstanbulJS** coverage reports and wrote **Mocha** tests, improving codebase coverage from **60 to 90%**.

Software Developer Student   05/2022 - 08/2022
BlackBerry   *Waterloo, ON*

- Implemented **Spring Boot** CRUD APIs with distributed **Kafka** event streaming for **Docker** microservices.
- Developed modular **TypeScript React** components backed by **Cypress** tests with **MUI** and **Redux**.
- Optimized **Kafka Streams** operations and closed leaks for a **32% memory savings** per million Kafka messages.

Software Developer Student   09/2021 - 12/2021
BlackBerry   *Waterloo, ON*

- Engineered a **10x React** tree render speedup for existing code by integrating large list virtualization.
- Implemented performant **Java Spring Boot** API endpoints using **Hibernate** and **Kafka Streams**.
- Composed robust **Mockito** and **JUnit** microservice tests integrated with **Docker Testcontainers**.

Software Engineering Intern   01/2021 - 04/2021
MentumQR   *Toronto, ON*

- Designed a real-time WebSocket order status page and menu editor in **TypeScript React** and **Redux**.
- Cached expensive **Go** backend endpoint calls to **S3**, resulting in a **3.5X** speedup in response time.
- Developed interactive **React Native** kiosk screens with **TypeScript**, **React Query** and **Recoil**.

OPEN-SOURCE CONTRIBUTIONS

- Bug & crash fixes for Linux desktop GNOME apps using **C**, **GTK**, **GDB**, **Valgrind** and **AddressSanitizer**.

PROJECTS

[**RadioMap.ca**](https://radiomap.ca) serverless internet radio platform with **TypeScript React** and **Node.js** on **AWS**

[**EquationSpace.com**](https://equationspace.com) real-time collaborative graphing calculator using **Node.js** and **Firebase**

[**USBMouse**](https://usbmouse) Compact **Linux** USB subsystem mouse driver using USB Request Blocks

EDUCATION

Candidate for BASc in Honours Computer Engineering Co-op, University of Waterloo   Expected 2025