Gary Li

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ORACLE®
Certified Associate
Java SE 8 Programmer

Skills

Programming	Java, JavaScript, Typescript, Go, OOP, HTML5, CSS
Frontend	React, React Native, Material-UI, Redux, Redux-Saga, Recoil
Backend	Spring Boot, Apache Kafka, Hibernate ORM, PostgreSQL, Docker
Tools	Git, Maven, Cypress, Linux command line, Postman, Elastic Kibana, Grafana

Work Experience

BlackBerry   *Waterloo, ON*
Software Developer Student   *May. 2022 - Aug. 2022*
- Implemented **Java Spring Boot** CRUD APIs and **Kafka** producers/consumers for **Docker** microservices with **Hibernate**.
- Developed CRUD API front-end for the **React** BlackBerry endpoint management console with **Typescript**, **Material-UI** and **Redux-Saga**.
- Validated data constraint specifications by programming **PostgreSQL** trigger functions and **SQL** schema.
- Profiled and reduced microservice memory allocation by closing an iterator leak and refactoring KStream operations, resulting in a **32% reduction** per million handled Kafka messages.
- Improved microservice code coverage by composing **Mockito**, **JUnit** and Docker **Testcontainer** tests.

BlackBerry   *Waterloo, ON*
Software Developer Student   *Sept. 2021 - Dec. 2021*
- Worked with a **microservice architecture** to implement performant features using **Java Spring Boot**, **Hibernate** and **Kafka streams**.
- Implemented front-end **React** components with **Typescript**, **Material-UI** and **Apollo Queries**.
- Improved React performance of large tree datasets by integrating *react-virtualized-trees*, resulting in a **10X render time speed-up**.
- Composed automated **Typescript Cypress** tests as part of Gitlab CI to improve software reliability.

MentumQR   *Toronto, ON*
Software Engineering Intern   *Jan. 2021 - Apr. 2021*
- Programmed a real-time WebSocket order status page and menu editor using **React**, **Typescript** and **Redux** with **Typescript Cypress** tests.
- Implemented caching for backend by deserializing pre-determined data from **Amazon S3**, resulting in a **3.5X** speedup in response time.
- Programmed Doordash integration webhooks with **Go** and **PostgreSQL**, where the integration handled **400 orders weekly** and **$10,000 in sales**.
- Developed interactive kiosk screens using **Typescript**, **React Native**, **React Query** and **Recoil** from Figma prototypes.

Bridgespace   *Toronto, ON*
Fullstack Software Developer   *Jul. 2020 - Aug. 2020*
- Programmed and documented an **AWS Lambda** function with **Node.js** to collect Mailchimp audience fields data on user signup.
- Implemented frontend pages from Figma prototypes using **Bootstrap**, **JQuery**, **HTML5** and **CSS**.
- Worked with team to integrate **AWS Cognito** and **SES** with backend using AWS PHP SDK.

Projects

SemesterShare.com - time table social platform   *2018*
- Programmed backend **RESTful** API with **Java**, **Spring Boot**, **Hibernate ORM** and **MySQL**, with frontend using **JavaScript** and **Bootstrap**.

EquationSpace.com - real-time collaborative graphing calculator   *2019*
- Developed backend with **Node.js** and hosted it on **Firebase Functions** with a serverless architecture.

Distinctions

- 2020 Oracle Certified Java Programmer (Passed with 95%)
- 2019 picoCTF Cybersecurity Competition (Top 4.53%)

Education

University of Waterloo   *Waterloo, ON*
Candidate for Bachelor of Applied Science in Honours Computer Engineering, Co-op   *2020 - 2025*