

Jaehong Lee (Jay)

Email: jla688@sfu.ca

jaehonglee.com [↗](#) • github.com/jayhonglee [↗](#) • linkedin.com/in/jayhonglee [↗](#) Phone: Provided upon request

EDUCATION

Simon Fraser University

Bachelor of Applied Science in Computer Engineering, Co-op (BASc)

Burnaby, BC

Expected Aug. 2026

WORK EXPERIENCE

Samsung Electronics

Full-Stack Engineer Co-op

Vancouver, BC

May 2024 – Present

- Utilized **Google Cloud**, and **Next.js**, to develop a centralized data hub for tracking emerging AI technologies.
- Designed **RESTful APIs** using **Python** with **FastAPI**, connecting with **BigQuery** to streamline data pipelining.
- Developed Samsung Knox cloud service frontend using **TypeScript**, impacting over **70 million** devices globally.
- Implemented **Micro Frontend** architecture using **Module Federation** to enhance scalability and maintainability.
- Conducted **Cypress** end-to-end testing to ensure the reliability and performance achieving a **99.9%** test pass rate.

Intersystem Controls, Inc.

Frontend Developer Co-op

Vancouver, BC

Sep. 2021 – Dec. 2021

- Led hotel touch panel frontend development using **HTML**, **CSS**, **JavaScript**, **React**, successfully deployed. **[Image]**
- Integrated **REST API** with **Postman**, improving frontend performance through a **20%** reduction in response time.
- Developed a configurable module, reducing manual input by **80%**, and establishing scalable architecture.
- Ensured component modularization and robustness through comprehensive **Jest** unit testing.
- Collaborated with UX/UI designer and participated in interviews, showcasing strong communication and contribution.

SELECTED PROJECTS

GrabPencil.com [↗](#)

Sep. 2023 – Jan. 2024

- Developed **Node.js**-based backend **REST API** to facilitate CRUD operations for tutoring job postings.
- Designed **MongoDB** database search feature with extensive filters, increasing tutor finding efficiency by **70%**.
- Implemented stateless **JWT**-based authentication, ensuring data integrity and preventing tampering.
- Utilized **Socket.io** for chatting system, resulting in real-time communication and enhanced user engagement.
- Conducted backend API endpoint testing using **Jest** and **Supertest** for comprehensive validation and reliability.

Maze Game [↗](#)

Apr. 2023

- In a team of three, used **Maven** for **Java** game application development, enhancing project management efficiency.
- Employed **OOP** with UML class diagram, optimizing development and code organization.
- Collaborated on a remote repository using **Git** for efficient version control and team collaboration.
- Utilized **Scrum** for iterative development, achieving a **100%** success rate in delivering products as planned.
- Employed **JUnit** for unit testing and conducted line and branch coverage testing to validate code effectiveness.

CERTIFICATES

Udemy Online Courses

- | | |
|---|-----------|
| JavaScript: Understanding the Weird Parts ↗ | Dec. 2023 |
| The Complete Node.js Developer Course (3rd Edition) ↗ | Feb. 2023 |
| The Complete JavaScript Course 2024: From Zero to Expert! ↗ | May 2021 |
| Modern HTML & CSS From The Beginning (Including Sass) ↗ | Sep. 2020 |

TECHNICAL SKILLS

- Languages:** HTML, CSS, JavaScript, TypeScript, C, C++, Java, SQL, MATLAB, \LaTeX
- Frameworks and Libraries:** Node.js, Express.js, React.js, React Native, Redux, Mongoose, Cypress, Jest, JUnit
- Technologies and Tools:** Git, Bash, Unix, Linux, Heroku, Render, NoSQL, MongoDB