Jaehong Lee (Jay)

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EDUCATION

Simon Fraser University   Burnaby, BC
Bachelor of Applied Science in Computer Engineering, Co-op (BASc)   Sep. 2019 – Present

TECHNICAL SKILLS

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

WORK EXPERIENCE

Samsung Electronics   Vancouver, BC
Full-Stack Engineer Co-op   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** and **BigQuery** reducing processing time by **25%**.
- Developed Samsung Knox cloud service frontend using **TypeScript**, enhancing usability for **70 million** devices.
- Implemented **Micro Frontend** architecture using **Module Federation**, reducing deployment times by **30%**.
- Conducted **Cypress** end-to-end testing to ensure the reliability and performance achieving a **99.9%** test pass rate.

Intersystem Controls, Inc.   Vancouver, BC
Frontend Developer Co-op   Sep. 2021 – Dec. 2021

- Led hotel touch panel frontend development and successfully deployed using **HTML**, **CSS**, **JavaScript**, **React**.
- Integrated **REST API** with **Postman**, improving frontend performance through a **20%** reduction in response time.
- Developed a configurable **JSON** module, reducing manual input by **80%**, and establishing scalable architecture.
- Ensured component robustness through comprehensive **Jest** unit testing, achieving **95%** test coverage.
- Worked with a UX/UI designer to create the design system, resulting in twice as many positive user feedback comments.

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 security and data integrity across multiple applications.
- Utilized **Socket.io** to develop a peer-to-peer instant messaging system, resulting in real-time communication.
- Conducted backend API endpoint testing using **Jest** and **Supertest**, preventing **10+** critical issues before deployment.

Maze Game ⬈   Apr. 2023

- Used **Maven** in a team of three for **Java** game application development, streamlining builds across the team.
- Employed **OOP** with UML class diagram, optimizing development and achieving **100%** code transparency.
- Led version control management on a **GitHub** repository using **Git** for efficient version control and team collaboration.
- Reinforced **Scrum** principles with weekly stand-ups and sprint reviews, ensuring **100%** on-time product delivery.
- 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