Jaehong Lee (Jay)

SKILLS

- LANGUAGES: JavaScript, Typescript, Python, Java, C, C++, HTML, CSS, SQL
- FRAMEWORKS: React.js, Node.js, Next.js, Express.js, FastAPI, React Native, Redux, Cypress, Jest, JUnit
- TOOLS: JWT, Google Cloud Platform, MongoDB, NoSQL, Git, Bash, Unix, Linux, Heroku, Render

EXPERIENCE

SAMSUNG ELECTRONICS

Vancouver, BC

Full-Stack Engineer Co-op

May 2024 - Present

- · Led the creation of a centralized data hub for tracking emerging AI technologies using Python and Typescript.
- Implemented Next.js server-side rendering, reducing Time to First Byte by 50%
- Utilized Google Cloud BigQuery with SQL to efficiently query and process over 1.5 million data points.
- Designed RESTful APIs using Python with FastAPI resulting in a 30% increase in response times.
- Conducted Cypress end-to-end testing with TypeScript to achieve a 100% test pass rate in addressing edge cases.

INTERSYSTEM CONTROLS

Vancouver, BC

Frontend Developer Co-op

Sep 2021 - Dec 2021

- Spearheaded touch panel frontend development with React, deploying it in a commercial hotel for 300+ users.
- Integrated **RESTful APIs** using **Postman**, achieving a **98%** API call sucess rate and **doubling** positive user feedback.
- Developed a configurable JSON module that reduced manual input by 80% and established a scalable architecture.
- Implemented Redux for state management, cutting state-related bugs by 40% and enhancing application stability.
- Ensured component robustness by conducting comprehensive **Jest** unit testing, achieving **95%** test coverage.

PROJECTS

GRABPENCIL.COM

Sep 2023 - Jan 2024

- Built a full-stack web app with JavaScript and Express.js for students to post or find tutoring services.
- Developed Node.js-based backend RESTful APIs 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.

MAZE GAME [7] Apr 2023

- Utilized Maven in a team of three for a Java game application development, streamlining build integrity across the team.
- Employed OOP principles with UML diagrams, saving an average of 20 hours monthly in architecture communication.
- 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.
- Deployed JUnit for unit testing and conducted line and branch coverage testing to validate code effectiveness.

EDUCATION

SIMON FRASER UNIVERSITY

Burnaby, BC

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

Expected Aug 2025

CERTIFICATES

UDEMY

Understanding TypeScript □

Present

JavaScript: Understanding the Weird Parts ☐

Dec 2023 Feb 2023

The Complete Node.js Developer Course (3rd Edition) □

May 2021

The Complete JavaScript Course 2024: From Zero to Expert! □

Modern HTML & CSS From The Beginning (Including Sass) ☑

Sep 2020