Jaeyong Lee

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EDUCATION

University of Toronto (St. George)   Sept 2022 - May 2027
BSc., Computer Science, Focus in Artificial Intelligence

- **Relevant Courses:** Data Structures & Analysis, Software Design (Java), Software Tools & Systems Programming (C), Computer Organization, Introduction to Databases (SQL), Introduction to Software Engineering

EXPERIENCE

PointClickCare   Jan 2025 - Present
Software Engineer Intern   *Toronto, ON*

- Developing backend microservices using **Java** and **Spring Boot** for a patient care coordination platform, enhancing support for wellness teams and pharmacies across **27,000+** long-term and post-acute care facilities.

Geotab   May 2024 - Dec 2024
Software Developer Intern   *Toronto, ON*

- Delivered key features and data dashboards processing telematics data from **4 million+** connected vehicles for the Intelligent Transportation Analytics platform using **TypeScript**, **React**, and **Redux**.
- Built a **reverse proxy server** in **Go** with encryption and a **RESTful** interface, streamlining secure API gateway interactions.
- Enhanced system performance and maintainability by migrating **6+ microservices** from **Express.js** to **Go** and optimizing **DaaS API endpoints** with **Google BigQuery**, achieving a **25% improvement** in response times.
- Implemented server-side **BigQuery** job orchestration in **Go** with real-time monitoring via **WebSockets**, improving efficiency.

Intelligent Adaptive Interventions Lab   May 2023 - Mar 2024
Research Software Developer   *Toronto, ON*

- Conducted extensive data analysis using **Python**, providing critical insights that informed research papers and posters.
- Built and enhanced APIs for researchers using **FastAPI** and **Express.js**, integrating asynchronous processing and writing efficient **SQL** queries, improving response times by **30%**.
- Developed and deployed software interventions to **100+** students to investigate use cases of **LLMs** in education and facilitate A/B testing using **TypeScript**, **PostgreSQL**, and **Vercel**.

University of Toronto, Department of Computer Science   May 2023 - Aug 2023
Software Developer   *Toronto, ON*

- Developed a course planning application using **JavaScript** and **React** that streamlines the degree planning process for **31,000+** students. Implemented comprehensive unit tests using **Jest**, **Enzyme**, and the **React Testing Library**.
- Improved the efficiency of the **CI pipeline** and reduced build times by ~**50%** in **CircleCI**.

PROJECTS

Causal Systems Analysis & Visualization Platform 🔗 | *Next.js, Firebase, TypeScript, React, Three.js, Vercel*

- Developed and shipped a web platform enabling interactive 3D exploration of complex causal systems for UofT's Machine Learning Research Group, enhancing research capabilities for **50+** researchers as part of a 7-member team.
- Built a robust data model in **Firestore** to facilitate **role-based access control** and efficiently query user and graph data.

EasyChat: Real-time Instant Messaging 🔗 | *MongoDB, Express.js, React, Node.js, Typescript, Socket.IO*

- Independently developed a comprehensive instant messaging application featuring a **RESTful** backend and modern UI.
- Implemented secure **JWT** user authentication and enabled bidirectional client-server interaction with **WebSockets**.

ScanEats 🔗 | *Python, TensorFlow, Flask, React*

- Built a full-stack **machine learning** app, training a **CNN** with **TensorFlow** to rate fruit freshness from a live webcam feed.

SKILLS & CERTIFICATES

- **Languages/Frameworks:** Python, Java, Go (Golang), C, JavaScript, TypeScript, SQL, NoSQL, HTML/CSS, Tailwind CSS, Flask, Express.js, Spring Boot, Jest, PostgreSQL, MongoDB
- **Tools/Libraries:** React, Node.js, Postman, TensorFlow, Redux, CircleCI, Git
- **Certificates:** Cloud Computing Foundations with Azure, GCP, and AWS *(Duke University, Coursera)* 🔗