GitHub



Languages

Java, JavaScript, TypeScript, Python, SQL, C, C++, HTML5, CSS

Frameworks & Development Tools

React, Angular, Flutter, Node.js, Spring, Django, Express.js, Redis, MongoDB, MySQL, Firebase, OpenShift, Docker

EDUCATION

University of Waterloo Computer Engineering, Honours | GPA: 4.0 Term Dean's Honours achieved every term

Waterloo, Ontario

Class of 2026

Work Experience

Capital One

Full Stack Software Developer Co-op

Jinha Kim

Toronto, Ontario

January 2025 - April 2025

 \S RBC

Toronto, Ontario

January 2024 - April 2024

Software Developer Co-op

- Engineered and released a new secure client onboarding experience for RBC's tokenization manager, reducing onboarding time by 98%, leading backend architectural API decisions, and building intuitive UX with Spring and Angular.
- Convinced team leadership about the security and usability advantages of custom Passkevs integration over externally sourced alternatives through development of a mobile app prototype with Flutter.
- Saved company-wide developer time by designing an Angular project template that enhanced maintainability and streamlined deployment processes.

Untether AI

Toronto, Ontario

Systems Software Developer Co-op

September 2022 - December 2022

- Rapidly learned firmware development and CLI command design to independently implement multi-bank read/write operations and packet initialization features, creating a linker script and makefile to generate ELF files, ensuring seamless testing and hardware compatibility.
- Solved complex hardware-software integration challenges to develop robust chip socket connection, socket configuration, receive interrupt handling, and data transmission.

Onsemi

Waterloo, Ontario

Software Tools Developer Co-op

January 2022 - April 2022

- Enhanced user experience with improved hearing aid performance by maintaining Bluetooth Low Energy power at 8 dBm for better signal stability and battery life, while fixing watchdog refresh issues to ensure reliable operation.
- Optimized the development workflow by designing a headless build process with Python, integrating the Keil IDE to streamline project building, debugging, and flash downloads.

Projects

Rendezvous Radar

Django, Torch, Pandas, Python, React, TypeScript

- Designed and delivered a full-stack application enabling users to find points of interest through activity categories or natural language prompts, leveraging machine learning for relevant results.
- Learned and applied fine-tuning techniques for the DistilGPT2 large language model using Python and Torch to classify user input into points of interest, optimizing hyperparameters to achieve accurate and reliable results for diverse queries.
- Developed and optimized a robust backend using **Django** to process geolocation data via Nominatim, handle API calls, and retrieve points of interest from OpenStreetMap, integrating Pandas for efficient data processing and querying.

FakeBook App

NodeJS, ExpressJS, MongoDB, TypeScript, ReactJS, HTML, CSS

- Independently built a social networking app which enabled users to connect, personalize profiles, share updates, interact with posts, receive friend suggestions, and third-party Facebook login, focusing on user engagement and experience.
- Designed a RESTful backend with Node and Express to store and manage data in MongoDB, ensuring maintainability and scalability.
- Integrated secure authentication features including password encryption, authentication, and token-based login.