

TECHNICAL SKILLS

Languages: Go, TypeScript, JavaScript, Python, Java, C++, C#, C, Kotlin, CSS, HTML, SQL, ECMAScript

Frameworks/Tools: React, Angular, Node, Express, Redux, Jest, GraphQL, REST, MongoDB, Postgres, Spring Boot, OpenAI API, Prompt Engineering, Jetpack Compose, Android Studio, Unity, Git, Agile

EDUCATION

Bachelor of Computer Science, University of Waterloo, cGPA: **96.00%** Sep 2022 - Apr 2025

Bachelor of Computer Science, University of New Brunswick, cGPA: **4.3 / 4.3** Sep 2020 - Aug 2022

- Recognized as top **1/256** of CS undergraduate class by receiving the **Computer Science Prize**.

WORK EXPERIENCE

Khan Academy Jan 2024 - Apr 2024
Software Engineer Intern Mountain View, CA

Python | Go | LangChain | GPT-4 | OpenAI API | GraphQL

- Porting **Go-based AI workflow** to **Python-powered pipeline** with **LangChain**.

Khan Academy May 2023 - Jul 2023
Software Engineer Intern Mountain View, CA

React | Go | GPT-4 | OpenAI API | GraphQL | Flow | Jest | CSS

- Developed and deployed one of the most-requested user features for **Khanmigo AI tutor chatbot**: stopping generation of GPT-4 AI responses, **projected 975k feature uses/yr**.
- Collaborated in driving "**Khanmigo Insights**", enabling Khanmigo to learn about the user and tailor responses accordingly. **Prompt engineered** existing AI requests for insight extraction and merging, improving response consistency by **~70%**.
- **Led architectural planning** for Khanmigo anti-cheat, **preventing 99% of cheating** with Khanmigo.
- Worked in a full-stack capacity, utilizing **React** with **Flow** for front-end interfaces, **GraphQL** for data querying, and **Go** paired with **OpenAI's API** for back-end logic and AI interaction.

Populus Global Solutions Inc. May 2022 - Aug 2022
Full-Stack Developer Intern Fredericton, NB

Angular | TypeScript | Java | Spring Boot | REST | Jest | JUnit | Postgres | SQL | CSS

- Implemented in-app release notes, **saving 100 hrs/yr** of customer update meetings.
- Converted client-side bulk data export to server-side, **cutting export time by 67%**.
- Authored app-wide unsaved changes guard, and real-time auditing for user data input, eliminating user error and **improving user efficiency by ~30%**.

Mach85 Inc. Sep 2021 - Dec 2021
Junior Software Developer Intern Fredericton, NB

C++ | Java | Qt | JavaFX | CMake | Conan

- Development for a native desktop application software product in **C++** and **Java**.
- Reimplemented existing still-image analysis software to work with real-time video, **reducing analysis time by ~90%**.
- **Converted ~40%** of Java codebase to optimized C++, resulting in a **~250% performance improvement**.

PERSONAL PROJECTS

Orbit
Kotlin | Amazon Web Services (AWS) | DynamoDB | Amazon S3 | Amazon EC2 | Jetpack Compose

- **Android app** for finding, sharing, and saving events taking place in the Waterloo region.

SharePlace
Node.js | Express.js | MongoDB | React | Mongoose | JavaScript | Google Maps Geocoding API

- **Social media web app** for sharing images of places and viewing them in-app on **Google Maps**.

Imglabs.io
React | JavaScript | Next.js | Tailwind UI | Node.js | Supabase

- **Image proxy service** using edge computing. Primarily worked on the user-facing website and **auth**.

Gun Time | Grade: 100%

- FPS platformer/puzzler game, **over 100 hrs** of development time using **Unity** with **C#**.