

EDUCATION

University of Alberta

Edmonton, Alberta

B.Sc. Computing Science with Specialization

September 2020 - December 2026

EXPERIENCE

Demonware May 2024 – June 2024

Software Developer Intern

Vancouver, BC

- Used ReactJS to develop the Top-250 Leaderboards for Call of Duty: Black Ops 6.
- Implemented seasonal content updates and language localizations for multiple Call of Duty games.
- Worked with the QA team to identify and resolve bugs in the combat record menus.
- Refactored the existing codebase to improve performance, and increase development speed.
- Updated the frontend design of the Call of Duty League Hub to align with the new branding.

Freelance April 2023 – May 2024

Full-Stack Developer

Remote

- Developed an e-commerce site serving a **6,000+ player community** using Go and SvelteKit. | Link
- Created Discord bot applications for multiple clients using DiscordGo and Discord.Py.
- Built multiple Stripe integrations to make processing payments easier.
- Reworked client's existing code to improve performance and efficiency.

Alberta Chambers of Commerce

October 2021 - May 2024

Chamber Platform Coordinator

Edmonton, AB

• Various onboarding/support tasks and developed automatic survey aggregation tools with Go.

Projects

Compiler |C++

- Developed a compiler with a team of 4 for a general purpose language which compiled into LLVM IR using MLIR.
- Features include function calls, binary operatons, loops, conditionals, dynamic 2D arrays, structs, and memory management.
- Implemented a lexer and parser ANTLR4 to generate a custom Abstract Syntax Tree.
- Created a compiler to target RISC-V, X-86 and ARM architectures for vector based calculations.

Prize Bot V2 | Golang | Github Link

- Developed a Discord bot in Go for community events; active on 1000+ servers, tracking 440,000+ users.
- Implemented ticketing system for prize management and utilized AWS RDS for data storage.
- Optimized bot's performance and reduced deployment costs by 95% by transitioning from AWS to Railway.
- Developing a web dashboard using Sveltekit to manage administrative tasks on the bot.
- Integrated Stripe API for a premium subscription with Discord benefits.

Ark Guardian | Python

- Designed a service in Python for **tracking 160,000+ players across 1,450+ game servers** that enabled efficient server administration and player management
- Refactored codebase to improve performance and resolve memory leaks.

ScanPal | Java, Firebase, Android Studio | Demo

- Java Application developed using Android Studio in a team of 6 for creating, browsing, and registering for events.
- Used Firebase to securely store images and user data records.

TECHNICAL SKILLS

Languages: Go, Python, C/C++, RISC-V, Typescript, JavaScript, Java, Julia, MATLAB, Dart, HTML, CSS, SQL, R **Frameworks/Libraries**: SvelteKit, React, React Native, NextJS, Tailwind, HTMX, Flutter, Antlr