

EDUCATION

University of Alberta

Edmonton, Alberta

B.Sc. Computing Science with Specialization

September 2020 - December 2026

EXPERIENCE

Activision May 2024 – Present

Software Developer Intern

Vancouver, BC

Remote

- Developed web interfaces for **Call of Duty: Black Ops 6** and **Modern Warfare III** using **React**, adhering to performance constraints and memory limits across both PC and Console platforms.
- Worked on Leaderboards, Top 250, COD League Hub and Combat Record for multiple Call of Duty games.
- Refactored existing frontend code to improve performance, maintainability, and scalability.
- Implemented seasonal content updates and localization changes.

Freelance April 2023 – May 2024

Full-Stack Developer

- 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 an additional compiler to target RISC-V, X-86 and ARM architectures for vector based calculations.

Prize Bot V2 | Go | 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 | 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, ANTLR4