

Muhammad Ahmed

(403) 992-8471 | muhammada8@outlook.com | [Portfolio](#) | [GitHub](#) | [LinkedIn](#)

EDUCATION

University of Calgary

Bachelor of Science, Software Engineering — Dean's List

Calgary, AB

Expected May 2027

EXPERIENCE

Software Developer Intern

May 2025 – May 2026

SeisWare International Inc.

Calgary, AB

- Architected cross-process shared memory caching system in C++17 with Qt framework, reducing memory overhead by 87% across 8-application suite and eliminating cache duplication
- Reduced application startup times by 95%+ for subsequent applications by enabling instant cache access, eliminating seconds-long data fetching
- Engineered page table-based architecture with process synchronization primitives to safely handle concurrent access and race conditions
- Optimized OpenGL rendering pipeline by rewriting fragment shader and offloading computations to CPU, reducing render times by 28%
- Led technical design meetings and authored ADRs to drive consensus on feature architecture, collaborating with cross-functional teams in Agile sprints

Full-Stack Developer Intern

May 2024 – Aug 2024

Stratus

(Remote) Irving, TX

- Built responsive Angular application with focus on intuitive UI/UX and smooth user workflows for data management
- Integrated frontend with C# .NET backend via RESTful APIs, handling data visualization and user interactions

Senior Coding Instructor

Jun 2022 – Present

Code Ninjas

Calgary, AB

- Advanced 150+ students (ages 7–14) from block-based coding to JavaScript, achieving strong retention and skill progression
- Taught technical Unity C# classes covering design patterns, algorithms, and data structures

PROJECTS

WizdomRun | Educational Game — Unity, C#, Python, PostgreSQL, LLM

Mar 2025

- Led 6-person team building cross-platform educational game, designing prompt engineering pipeline for LLM-powered question generation
- Developed core Unity gameplay using singleton patterns for game state management, sprite animations, and frame rate optimization to ensure smooth 60 FPS performance
- Deployed Flask backend with PostgreSQL on Render for cloud-hosted user progress tracking

BriarBot | Discord Bot — Node.js, Docker

Sep 2024

- Developed an automated bot serving 100+ users across multiple servers with *Epic Seven* character analytics through web-rendered stat cards
- Implemented web scraping pipeline processing player data with intelligent caching, reducing response times from 3+ seconds to sub-500ms
- Deployed 24/7 production service using Docker containers on home Linux server infrastructure

Poké Sight | Battle Predictor — Python, Flask, HTML/CSS

Jan 2025

- Built ML-powered web app using Gradient Boosting classifier trained on 50,000+ historical battles, achieving 85% prediction accuracy
- Developed Flask API serving battle predictions based on Pokémon stats, types, and generation data, deployed at pokesight.cc

TECHNICAL SKILLS

Languages: C++, C, C#, Python, Java, JavaScript, TypeScript, HTML/CSS, SQL

APIs & Frameworks: Qt, OpenGL, .NET, Unity, React, Angular, Spring Boot, Flask, Node.js

Tools & Platforms: Linux, Docker, Git, Maven, JUnit, Jira, PostgreSQL, MySQL, Redis, Azure, Render, Firebase

Concepts: OS, Full-Stack, Game Development, Machine Learning, REST APIs, Web Scraping, Agile Methodologies