

Haider Ali

Vancouver, BC (Open to Relocate) | 246067.haider@gmail.com | linkedin.com/in/haideracs | github.com/haiderali077

Education

University of British Columbia

Class of 2026

Bachelor of Science in Computer Science

GPA: 4.0 / 4.33

- Relevant Coursework: Data Structures & Algorithms, Linear Algebra, Software Engineering, Web Programming, Databases, Computer Networks, Machine Learning, Probability & Statistics, Machine Architecture, Parallel Computing (CUDA), Computer Graphics, Data Analysis in Python

Experience

UBC

May 2025 – Dec 2025

Full Stack Developer – Part time

Kelowna, BC

- Developed TA allocation platform with **Deno**, **React**, **TypeScript**, and **PostgreSQL** supporting Faculty of Science departments and **100+ instructors**, replacing unorganized form-based processes with centralized submission, review, and allocation workflows.
- Designed **PostgreSQL schemas** and **migrations** for courses, applications, and allocations supporting **500+** applications.
- Engineered backend APIs with authentication and RBAC across auth, profiles, applications, courses, and allocation workflows.
- Implemented **50+ Deno tests** covering authentication, routes, services, and workflow logic to improve backend reliability.
- Built a **Docker** Compose development environment with isolated app, database, frontend, pgAdmin, and test database services to streamline setup, testing, and development.

UBC

Jan 2025 – Apr 2025

Research Assistant – Generative AI Simulation Project

Kelowna, BC

- Designed a Generative AI simulation engine using **GPT-4**, **TypeScript**, and **Python** for adaptive student behavior modeling.
- Built a prompt engineering pipeline with fine-tuned templates for adaptive GPT-4 student simulations.
- Implemented student learning models with personalized learning rates, sigmoid-based difficulty, and mastery tracking.
- Developed a TypeScript/Node.js pipeline with **MySQL** integration and automated CSV exports.
- Processed **10K+** interaction logs with validation and error handling to maintain consistent simulation outputs.

Lordco

May 2024 – Aug 2024

Software Engineer Intern.

Port Coquitlam, BC

- Assisted in developing inventory synchronization features to maintain accurate stock visibility across **10+** warehouse locations.
- Supported the implementation of **ETL** pipelines to integrate supplier inventory feeds and automate stock updates.

Projects

TSKFLO (Task-Management System) | React, Node.js, MongoDB, Socket.IO

- Architected a full-stack task management platform with 34 controller functions across **30+** REST endpoints, secured via dual-token **JWT authentication** and role-based access control for admin and user tiers.
- Engineered real-time collaboration using **Socket.IO** with authenticated **WebSockets**, powering live messaging, conversation rooms, and notification tracking across a **React** frontend managed with **Redux** Toolkit.

Social Media Content Distributor [Contract] | Go, Next.js, TypeScript

- Developed an application to concurrently upload social media posts, used by media managers with **400K+** followers.
- Optimized upload throughput using **Goroutines** for concurrent HTTPS requests and high-frequency media distribution.
- Designed a modular MVC Go API to support several platforms & accounts, centralizing logic into a **Next.js** dashboard.

VisualHoops NBA Analytics Platform | Python, pandas, scikit-learn

- Developed Web scraped **8800+** NBA player records across 12 seasons, engineering **20+** derived efficiency metrics.
- Applied K-means clustering, and **linear regression**, to surface player archetypes and predict playoff performance.
- Built a modular **Python** codebase with 28 pytest unit tests, full mypy type safety, and Dockerized **CI/CD** via **GitHub Actions**

Technical Skills

Programming Languages: Python, Java, TypeScript, JavaScript

Frameworks & Libraries: Spring Boot, Flask, FastAPI, Node.js, React, Next.js, OpenMP, CUDA

Tools: Git, Docker, MySQL, PostgreSQL, MongoDB, Jest, PyTest, REST APIs, Claude Code

Concepts: Backend Development, Full-stack Development, Software Engineering, Cloud Services, Microservices, Performance Systems, Machine Learning, Networks, Automation, CI/CD, Agile Scrum