

## Education

### University of Alberta

*Bachelor of Science in Computer Science and Artificial Intelligence (SIP/Co-op)*

**Expected Graduation: May 2027**

*Edmonton, Alberta*

## Experience

### INOVA Geophysical

**May 2025 – Present**

*Software Developer Intern*

*Calgary, Alberta*

- Automated processing of **500+** daily SQLite QC files into GeoPackages using **C#/.NET 8**, supporting HyperQ Analysis and QGIS workflows.
- Designed and deployed a global **Serial Allocation System** with **Azure** (SQL, App Services, Key Vault), enabling conflict-free assignment of **10,000+** serials per batch.
- Built a **React (TypeScript) + C#/.NET** web application used by **50+** global users to prevent duplicate part serials.
- Improved system reliability through real-time validation and increased unit-test coverage by **30%**.
- Supported cross-site operational workflows using **SharePoint, Teams, and Outlook** across Calgary, Houston, and Edinburgh.

### Remote Research FIRE Program, NUS

**September 2024 – January 2025**

*AI/ML Research Intern*

*Singapore (Remote)*

- Built a multimodal mental health assistant (text, audio, video) using OpenAI APIs; improved emotion detection by **20%**.
- Applied transfer learning across modalities to increase robustness; collaborated with a global research cohort on experiments and deployment.
- Deployed a real-time support chatbot with inference-time safeguards and logging.

### National University of Singapore (NUS) & AWS

**May 2024 – July 2024**

*Data Analytics/ML Summer Internship*

*Singapore*

- Led** a team building a MobileNetV2 model reaching **95%** accuracy for driver-behavior classification.
- Deployed via **AWS** (S3, EMR, Lambda, SageMaker); reduced fleet alert response times by **30%**.
- Worked cross-functionally (4-person team) to deliver a Streamlit monitoring front end.

## Projects

### Sentio Mood Tracking App | *Java, Android, Firebase*

**March 2025**

- Led a team of 6** (Agile, 3 sprints) to deliver a mood app with **1,000+** events recorded.
- Real-time username validation reduced sign-up errors by **40%**; Firebase Auth/Firestore supported **100+** profiles with offline sync.

### Library Management System | *Python, SQLite*

**February 2024**

- Led** a 3-person team implementing CRUD for **200+** daily transactions.
- SQL pagination cut search times by **30%**; automated penalties removed **50+** monthly manual errors.

## Skills

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

**Frameworks/Libraries:** **React**, .NET 8, TensorFlow, PyTorch, Flask, NumPy, Pandas, Matplotlib

**Productivity:** **Excel**, **Word**, **PowerPoint**, **SharePoint**, **Teams**, **Outlook**, **OneDrive**

**Developer Tools & Cloud:** Visual Studio, VS Code, Git, SVN, Docker, Linux, Jira, Azure, AWS (S3, EMR, Lambda, SageMaker), GCP

**Testing:** NUnit, Moq, FluentAssertions, JUnit

## Relevant Coursework

- Data Structures & Algorithms
- Software Methodology
- Database Management
- Artificial Intelligence
- Machine Learning
- Neural Networks
- Reinforcement Learning
- Search & Planning in AI
- Visual Recognition
- Formal Systems & Logic

## Extracurricular

### Regional/National Badminton Player

**2022 – Present**

*Canada, Saudi Arabia*

- Ranked **#87** in Alberta; formerly **#2** in Saudi Arabia (Singles & Doubles).