

Usaid Ahmed

587-372-2069 | usaid1@ualberta.ca | linkedin.com/in/usaid | github.com/Usaidahmed10

PROFESSIONAL SUMMARY

Ambitious computing science student with a proven track record in AI research, software development, and leadership. Skilled in Python, machine learning, data-handling, and web technologies, with experience managing large projects and delivering innovative solutions. Adept at fostering teamwork and driving results in dynamic, high-pressure environments.

EDUCATION

University of Alberta

Sep. 2023 – Present

Honours Bachelor of Science in Computing Science - GPA: 4.0/4.0

- **Dean's Honor Roll (2023, 2024, 2025):** Awarded for maintaining a Cumulative GPA of 3.50 or higher annually.
- **Dean's Research Award:** Recognized for exceptional research contributions.
- **University of Alberta Scholarships:** Awarded multiple merit-based scholarships for academic excellence.
- **Key courses:** Data Science, AI, Machine Learning, Database Management, Software Engineering, Algorithms.

TECHNICAL SKILLS

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

Frameworks/Databases: React, Next.js, Node.js, Tailwind CSS, Supabase, MongoDB, PostgreSQL, SQLite

Cloud/DevOps: AWS (Lambda, S3, OpenSearch, Bedrock, CloudWatch), Docker, Vercel

Developer Tools: Git, VS Code, Cursor, Android Studio, Kaggle, OpenAI, Hugging Face, Flutter, RESTful APIs

Libraries: pandas, NumPy, Matplotlib, scikit-learn, TensorFlow, PyTorch, Streamlit, Flask, Pygame, NLP-libraries

EXPERIENCE

Teaching Assistant – Statistics (Scheduled)

Sep. 2025 – Dec. 2025

University of Alberta

Edmonton, AB

- Appointed as a TA for an undergraduate Statistics course, bridging computing science principles with statistical reasoning.
- Will support grading, student mentorship, and lead weekly seminars to reinforce data-driven problem solving.

Summer Artificial Intelligence Intern

May 2025 – Aug. 2025

MPAC (Municipal Property Assessment Corporation)

Toronto, ON

- Developed a production-ready **RAG-based Chatbot** to process 12,000+ sensitive internal documents.
- Engineered the full pipeline using **AWS Bedrock, Lambda, OpenSearch, S3, and CloudWatch**.
- Built robust data pipelines for **extraction, cleaning, keyword tagging, chunking, and embedding** of unstructured documents.
- Implemented advanced optimization techniques, increasing chatbot accuracy to over **85%** on firm-sensitive queries.
- Presented the project to the **CTO** and secured approval for production deployment across 2000+ employees.

Technology Director

Aug. 2025 – Present

Undergraduate Artificial Intelligence Society (UAIS)

Edmonton, AB

- Maintain and enhance the UAIS website and digital infrastructure to support events and member engagement.
- Advise members on AI project development and lead technical workshops.
- Represent the society at industry conferences and facilitate collaborations with external AI professionals.

Artificial Intelligence Research Assistant

Sep. 2024 – May 2025

Faculty of Engineering at University of Alberta

Edmonton, AB

- Conducted research on **Generative AI models** to enhance **Natural Language Processing** pipelines.
- Designed an interactive **Streamlit UI** to demonstrate the trained model's functionality .

Events & Information Technology Executive

Aug. 2024 – Present

Pakistani Students Association

Edmonton, AB

- **Led a team** of 10 members to plan and execute multiple large-scale cultural events.
- Developed a full-stack **interactive web application** for the association with user-friendly features.

Chief Operations Officer

Sep. 2022 – May 2023

Nixor Engineering Solutions (A student-led corporate entity)

Karachi, PK

- Supervised **R&D projects**, including an **RFID access system** and a **smart irrigation prototype**.
- Conducted an **introductory Python workshop**, training over 100 students in Python basics and algorithms.

PROJECTS

VibeSync: Mood-Driven Social Media App | Java, Android Studio, Firebase, Google Maps API

- Built a native Android app enabling users to post mood-based updates with text, images, and locations.
- Integrated **Firebase Auth, Firestore, and Storage** for authentication, data storage, and media handling.
- Implemented features like **VibeQuests, emoji bundles (VibeShift)**, and interactive **mood maps** using Google Maps API.

UAlberta CourseLens | Next.js, AWS Lambda, PostgreSQL, Python, Tailwind CSS

- Built a centralized platform aggregating UAlberta course data and professor reviews from Reddit, BearTracks, and RateMyProf.
- Engineered backend using **AWS Lambda** and algorithms for course difficulty and accessibility insights.
- Implemented secure authentication and deployed a fast, **student-focused UI** for personalized recommendations.

3D Ray Tracer | C, Makefile, PPM, Ray Tracing Algorithms

- Built a multi-file 3D ray tracer in **C language** with **semi-realistic lighting** and **anti-aliasing**.
- Engineered a high-performance rendering pipeline, achieving **real-time, photorealistic frame generation**.

Interactive Twitter CLI | Python, MongoDB

- Developed an interactive, **user-friendly** command-line application replicating core Twitter functionalities.
- Handled **10K+ simulated users** during testing, demonstrating robust database integration with **MongoDB**.

Machine Learning Projects | Scikit-learn, TensorFlow, PyTorch, Flask, Streamlit, NumPy, Matplotlib, OpenAI API

- Built Cat-Dog Classifier, Movies Recommender, Disease Predictors, and Chef-GPT using diverse **ML** techniques.
- Integrated **OpenAI API**, trained NNs on **Kaggle** datasets, and built dynamic UIs with **Streamlit** and **Flask**.

aMuse: Neuro-Marketing Application | Python, Flutter, Scikit-Learn, Figma, Google Colab

- Integrated **Muse EEG headsets** into an application to deliver **consumer insights** for consultancy agencies.
- Trained a model using the **cosine similarity algorithm** on a **100+ dataset** to measure subject engagement.