Ayub Hussein Ali

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EDUCATION

University of Alberta

B.S. in Computing Science Specialization

Edmonton, AB

Expected Dec 2026

Relevant Coursework: Data Structures & Algorithms, Software Engineering, Databases & File Management Systems, Search Planning & Artificial Intelligence, Discrete Mathematics, Linear Algebra, Calculus I & II

EXPERIENCE

Back End Developer Intern

Sep 2024 - Dec 2024

Ment (Remote)

Hamilton, ON

- Led the development of a real-time transcription tool using **OpenAI API** and **AWS Amplify**, automating speech-to-text conversion and reducing manual note-taking by 80%.
- Implemented real-time streaming with **AWS Amplify** to ensure low-latency conversation transcription, enhancing mentor-mentee collaboration.
- Optimized GraphQL backend services by caching API responses and restructuring database queries, improving response times by 27% and system scalability.

Data Science Intern

May 2024 – Aug 2024

Hiswai Analytics (Remote)

Vancouver, BC

- Analyzed user retention trends for search engines and websites, using **SQL** and **Python** to track bounce rates and session durations across **50,000+ users**, identifying key drop-off points and increasing returning users by **15**%.
- Conducted behavioral analysis on organic vs. paid traffic, uncovering a **22%** higher retention rate for organic users, leading to a refined marketing strategy.
- Worked closely with the client to optimize website navigation and search algorithms, resulting in a 12% increase in user retention and a more intuitive browsing experience.

Machine Learning Intern

May 2023 - Aug 2023

M2M Tech (Remote)

Vancouver, BC

- Completed structured training on machine learning fundamentals, delivering **5+ projects** with data preprocessing, feature engineering, and model evaluation using **Python** (scikit-learn, Bokeh).
- Applied k-means clustering on 10,000+ data points, improving segmentation accuracy by 15% through hyperparameter tuning.
- Presented model insights to the client, providing actionable recommendations and refining predictive models to align with **real-world constraints**.

Projects

PickMe - Lottery Event App | Java, Firebase, Android Studio

Sep 2024 - Dec 2024

- Developed a lottery-based event app in Java, leveraging Firebase Firestore for live updates and data storage.
- Implemented QR code scanning, geolocation tracking and user authentication to enhance security and usability.
- Collaborated in Agile sprints, refining features through sprint planning, iterative development, and code reviews.

NutriSmart - Responsive Meal Subscription Website | HTML, CSS, JavaScript

Jan 2025 - Feb 2025

- Planned website structure with wireframes, focusing on layout, typography, and color schemes for user engagement.
- Built a responsive website using CSS Flexbox and Grid, adding animations and JavaScript for interactivity.
- Ensured accessibility and cross-browser compatibility to deliver support diverse users and devices.

Technical Skills

Programming & Scripting: Python, C, C++ Java, Golang, JavaScript, TypeScript, HTML5, CSS3, Tailwind CSS Frameworks & Libraries: React, Next.js, Node.js, Express.js, Flask, GraphQL, scikit-learn, Matplotlib, Bokeh Developer Tools & Databases: Git, Linux, AWS (Amplify, QuickSight, S3, DynamoDB), Firebase, Supabase, SQLite, MongoDB, Docker, GitHub Actions CI/CD