

Saihaan Mahmud

 [Saihaan Mahmud](#) |  [Saihaan Mahmud](#) |  saihaan.mahmud01@gmail.com |  +1-403-899-3639

EDUCATION

BSc Computer Science, University of Calgary

Sept 2025 – Present

CLUBS AND EXPERIENCE

Junior VP Finance and Software Developer, UCalgary Trivia

Sept 2025 - present

Managed club finances by optimizing operating costs, leading sponsorship outreach, and coordinating fundraising initiatives. Successfully maintained a balanced budget as a newly established club, covering startup and initial event costs while supporting sustainable growth and expanded student engagement by the end of 2025.

Maintained and enhanced the club website while leading backend infrastructure development, including the migration of a local PostgreSQL database to AWS for a scalable trivia game platform. Led the initial system design and development for a university wide trivia hunt game, creating a centralized tool to link trivia ideas across the university, create new trivia hunters and elevate cross campus interconnectedness.

VEX Robotics

Sept 2021 - June 2025

Led autonomous systems development in C++, implementing PID based control loops and odometry driven localization for high-precision motion planning and driver skills optimization. Ultimately resulting in World Championship qualification, top 15 global autonomous skills ranking, and a top 3 nationwide autonomous skills ranking all in 2025.

SOFTWARE PROJECTS

CoopStudy

[Link to Repository](#)

Designed and built a full-stack web application using React, Next.js, Python, and AWS, centered around a RAG pipeline that processes user uploaded notes, textbook excerpts, and other materials. The system was created to address broken study habits by gathering multiple learning tools into a single platform, enabling students to generate flashcards, practice problems, summaries, and confidence based progress tracking to improve study efficiency and learning goals.

Good Samaritan

[Link to Repository](#)

Worked in a team to develop a cross platform mobile application using React Native, Node.js, Python, and AWS services (Lambda, DynamoDB) to connect non-profit organizations with individuals seeking volunteer opportunities. The platform was built to reduce technicalities in community engagement by streamlining discovery and coordination, resulting in a scalable system that improves accessibility for non-profits and strengthens local civic participation.

SKILLS

Programming Languages

Java, Python, C, C++, C#, JavaScript, Assembly, Go, Typescript

Web Development

HTML, CSS, React, Next.js, Node.js, Flask, Bootstrap

Data/ML & Analytics

NumPy, PyTorch, Tableau, PowerBI, RStudio

Cloud, Databases & Platforms

AWS, Azure, Firebase, PostgreSQL, SQL, Git