Debojeet Dam

Education

University of Calgary

Sep. 2022 - May 2027

Bachelor of Science in Software Engineering, Minor in Entrepreneurship and Enterprise Development

Calgary, Alberta

• Awards: 2x (2022, 2023) - 1st Place Schulich Engineering Competition [Consulting Engineering], 2nd Place Western Engineering Competition [Consulting Engineering], Jason Lang Scholarship

Technical Skills

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

Technologies/Frameworks: React, MySQL, NodeJS, DynamoDB, AWS, Docker, Git/GitHub, Next.JS 14, Java Swing

Projects

Dynamic Subway Information System | github.com/Dynamic-Subway-Information-System

July 2024

- Developed a Java application modeled after Calgary's subway screens, integrating real-time train position data from a simulator, displaying advertisements and a map of train locations using **Java Swing** for UI design.
- Structured a MySQL database system to manage advertisement content, including text and media files, with automatic rotation every 10 seconds, while implementing weather data retrieval using **OpenWeatherMap API**, parsing HTML with regular expressions to display daily weather reports on the subway screen application.

TinyThreads | github.com/TinyThreads

November 2023

- Developed a children's clothing swapping web app using React.js and Material UI for an enhanced user experience and accessibility, while implementing a Python/Flask backend.
- Leveraged AWS DynamoDB for the storage of data, Cloudinary for image management, and integrated OpenAI's ChatGPT4-Vision for image analysis to identify children's clothing in uploaded images, boosting platform functionality and promoting sustainability in fashion.

DriveAwake | github.com/DriveAwake

November 2023

- Developed an advanced driving assistance application, employing **React.** is for frontend development, to track EOG signals and enhance user road safety.
- Implemented C and Python for the machine learning model and Arduino connection, seamlessly integrating Flask for backend functionality.

Experience

University of Calgary Students Union

March 2024 - Present

Faculty Representative: Schulich School of Engineering

University of Calgary

- Elected in the 2024 Students' Union election with a total of 489 votes to advocate for student's interests and enhance post-secondary engineering education by collaborating directly with the faculty dean and other student representatives.
- Generated bylaws and policies regarding membership, elections, governance structure, meetings, membership fees, the acquisition, management and disposition of property, appointments to committees.

Alberta Collegiate Robotics

July 2023 - February 2024

Project Manager

Calgary, Alberta

- Spearheaded the development of an innovative, cost-effective myoelectric prosthesis for the arm, integrating 3D printed materials, EMG sensors, and ESP32 processors.
- Developed a dynamic MERN app with a user-friendly React front-end, efficient Node.js and Express server-side logic, and robust MongoDB database, featuring intuitive controls and customization.

Schulich Ignite

January 2023 - April 2023

Programming Mentor

University of Calgary

• Proactively mentored aspiring students, imparting foundational knowledge of frontend web development, cultivating expertise in key technologies including JavaScript, HTML/CSS, and Node.js.

Engineering Students' Society

September 2022 – April 2023

First Year Representative

University of Calgary

• As a representative for a cohort of 100+ students at the University of Calgary, demonstrated leadership in community engagement, volunteered for campus events, and contributed significantly to improving the first-year engineering curriculum through consistent engagement in meetings with academic coordinators.