Aditya **Prasad**

SOFTWARE ENGINEER · SOFTWARE ENGINEERING MAJOR · UNIVERSITY OF CALGARY

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About Me

Programming Skills Java · C/C++ · Python
Technologies MySQL · Git/GitHub · Docker · AWS
Web Development React · JavaScript · CSS · HTML · Typescript · Figma

Education

Schulich School of Engineering, University of Calgary *Calgary, Alberta, Canada*
BACHELOR OF SCIENCE – MAJOR IN SOFTWARE ENGINEERING *September 2021 - Present*

- Graduation Season: Winter 2024
- Relevant Courses: Data Structures & Algorithms · Prob Stats & Machine Learning · Full Stack Web Dev. · Discrete Math · Databases

Engineering Experience

University of Calgary Relectric Car Team *Calgary, Alberta*
FRONTEND SOFTWARE DEVELOPER *September 2022 - Present*

- Worked in an interdisciplinary team to design and develop a fully electric car conversion from a 1966 Volvo P220
- Collaborated with UX/UI Designers to implement React-based UI components, resulting in a 10% increase of page load speed.
- Created a sleek and intuitive interface for drivers to access car data and various functions, including a light/dark mode feature for improved usability.
- Troubleshot and optimized JavaScript errors, ensuring a stable and performant integration of the software and electric vehicle system.
- Technologies Used: React · Typescript · JavaScript · CSS · Figma · Docker

Engineering Student's Society, University of Calgary *Calgary, Alberta*
FIRST YEAR REPRESENTATIVE *September 2021 - April 2022*

- Spearheaded communication between ESS and 200 first-year students, resulting in an 8% increase in student engagement.
- Actively participated in weekly ESS meetings, advocating for First Year students and promoting decision-making processes that improved operations.
- Orchestrated 10+ events attracting upwards of 500 attendees and yielding a 25% increase in membership.

Competitions and Personal Projects

River Flow Data Analysis and Storage Tool *Calgary, Alberta*
HTTPS://GITHUB.COM/AD1TYA-PRASAD/RIVER-FLOW-DATABASE *November 2022*

- Created a C++ program to analyze and store river flow data using linked lists and text file input/output techniques.
- Utilized ifstream and ofstream objects to efficiently read and write data to files for analysis and storage.
- Ensured proper file handling by implementing error checking for unsuccessful file openings and manually closing files when no longer needed
- Technologies Used: C · C++

Hack The Change Hackathon *Calgary, Alberta*
HTTPS://GITHUB.COM/AD1TYA-PRASAD/CTC-HACKATHON-2022 *November 2022*

- Created a program to efficiently allocate resources to non-profit organizations based on statistical analysis and machine learning.
- Conducted statistical analysis to identify key relationships between variables.
- Applied machine learning techniques to determine the most suitable non-profits for addressing specific problems.
- Implemented continuous improvement strategies to enhance the performance of the resource allocation program over time.
- Technologies Used: Python · Jupyter Notebook · Scikit-learn · HTML · CSS · JavaScript

Art Museum Database *Calgary, Alberta*
HTTPS://GITHUB.COM/AD1TYA-PRASAD/MUSEUM-DATABASE *December 2022*

- Developed a python interface for maintaining and updating the database, including a login system with different functionality based on user privileges.
- Demonstrated strong problem-solving skills in troubleshooting and debugging the application during development, including the ability to identify and resolve issues with the database schema and SQL queries.
- Technologies Used: MySQL · Python

Kernel Seed Machine Learning Model *Calgary, Alberta*
HTTPS://GITHUB.COM/AD1TYA-PRASAD/SEED-ML-MODEL *December 2022*

- Worked on a project to expand on a new dataset relating to wheat, with 210 instances, 7 attributes, and 3 classes.
- Conducted graphical data analysis, including creating figures such as a trimodal histogram of seed area, and plots of perimeter, compactness, length and width of kernel, and asymmetry coefficient as related to area.
- Developed a machine learning model to classify new instances of wheat varietals with an accuracy rate of 91.67% in the training set, and 90.57% in the test set.
- Technologies Used: Python · Pandas · Scikit-learn · Matplotlib · NumPy