# Arfaz Hossain

#### Education

#### **Bachelor of Software Engineering**

University of Victoria

Sep 2021 – Aug 2026 *Victoria*. *BC* 

# Selected Projects

#### Study Sprints

Feb 2024 – Present

• https://www.github.com/VikeLabs/Study-Sprints

Victoria, BC

- Collaborating with a team of developers to create a full-stack Pomodoro application using React, TypeScript, and MongoDB, addressing users' time management requirements comprehensively
- Employing NextJS to design a robust backend system, integrating MongoDB for data storage and retrieval, enabling users to track and review their past activities seamlessly within the application interface

#### Ground Support System

Jul 2023 - Jan 2024

• https://www.github.com/UVicRocketry/Ground-Support

Victoria, BC

- Collaborated with a team of 10-15 developers in developing a full-stack telemetry visualization and post-flight analytical software system for engineering students analyzing rocket performance in real-time
- Implemented 15+ Material-UI components in React with TypeScript, ensuring type safety and fidelity to Figma designs, thereby enhancing adaptability and usability across multiple platforms
- Incorporated design patterns including *Microservice Architecture* and *Entity-Based Design* using Mongoose, streamlining backend development and database interaction

#### Rubik's Cube (3D Simulation)

Feb 2023 – June 2023

https://www.github.com/arfazhxss/OpenGL-projects

Victoria, BC

- Developed a 3D simulation utilizing OpenGL libraries GLUT, GLFW, and GLM, incorporating graphics rendering techniques through GLSL (Shader Language) for visualizations, mathematical operations
- Implemented intuitive keyboard and mouse controls, including precise cube rotations with keys such as L, J, I, K, and dynamic zoom functionalities with keyboard shortcuts

### Simple Weather Application (iOS)

Apr 2023 – Nov 2023

• https://github.com/arfazhxss/Weather-Application

Victoria, BC

- Developed an iOS application using Swift programming language with a strong emphasis on object-oriented programming principles, ensuring a modular and maintainable codebase
- Implemented a user-friendly interface that seamlessly integrates with OpenWeather API, allowing users to effortlessly access and navigate through accurate weather information for their current city

## Experience

### **Graphics Coordinator**

Jan 2023 – Present

Engineering Student's Society (ESS)

Victoria, BC

• Designed and illustrated a total 15+ posters and 20+ social media posts while managing office hours to ensure the availability of the student lounge, maintaining websites and social media accounts

# Technical Skills

Languages: Java, Python, SQL (Postgres), JavaScript, TypeScript, R

Frameworks: NodeJS, ReactJS, JUnit, MongoDB, Express

Databases:MySQL, PostgreSQL, MongoDBTools:Git, Docker, GitHub ActionsLibraries:ReactJS, NextJS, Express, NumPy

arfazhxss.ca/resume.pdf