

**Professional Summary:** Results-driven mechanic transitioning to software development with expertise in systems thinking. Experienced in designing, implementing, testing, and maintaining complex systems within dynamic teams.

## Education

### Bachelor of Science With Distinction in Software Engineering

**September 2019 – December 2023**

Cumulative GPA: 3.5 / 4.0 [Dean's List]

Schulich School of Engineering, University of Calgary, AB

### University Preparation Program

**January 2016 – December 2018**

Cumulative GPA: 4.0 / 4.0

MacEwan University, Edmonton, AB

## Skills

**Languages:** Proficient in JavaScript, HTML5, CSS3, Python, Java, C, and C++

**Frameworks:** Hands-on experience with React.js Node.js, Flask, and data analysis libraries

**Database Management:** Competent in SQL and NoSQL database systems, prioritizing secure and efficient data handling

**Development Methodologies:** Familiar with Agile and User-Centered Design, desire to apply in a professional setting

**Developer Tools:** Versatility in Git, Postman, NPM, Draw.io, Figma, MySQL Workbench, and MongoDB Atlas

**Software Design:** Adept in Low-level design patterns and high-level architectural patterns (e.g., MVC and client-server)

**Software Testing:** Skilled in conducting rigorous automated testing to create robust systems (e.g., JUnit and pytest)

**Systems Integration:** Knowledge of integrating subsystems within a complex system to ensure stable operation

**Troubleshooting:** Expert in using analytical thinking to resolve complex technical issues and support system reliability

## Projects

### Unmanned Underwater Vehicle

**September 2022 – April 2023**

Python, MAVlink, TCP, drone prototype, and hardware

Unmanned Vehicles Robotarium Lab, Calgary, AB

System Architect/Integration Specialist

- Created a distributed and embedded system for underwater drone control with response times under 100 ms
- Designed a Python-based GUI adhering to MVC and client-server patterns with real-time movement data display
- Synchronized and configured protocols between the GUI and 9 electronic devices to ensure seamless integration

### University Marketplace Web Application

**September 2022 – December 2022**

MongoDB, Express.js, React.js, Node.js, and Socket.IO

University of Calgary, AB

Full Stack Developer

- Developed 10+ dynamic React.js components for intuitive user interactions involving item posts and chat
- Contributed to RESTful API, routing, and authentication to promote system integrity for 6+ simultaneous users

## Additional Work Experience

### D.G.C. Contracting Inc.

**February 2012 – January 2016**

Heavy Equipment Technician Apprentice

Spruce Grove, AB

- Engineered complex mechanical systems such as a hydraulic dump truck to increase company productivity
- Collaborated competently within teams of 2 - 30 members on mechanical and TELUS infrastructure projects
- Meticulously maintained and modified 200+ units using systems thinking and creative problem-solving