

Professional Summary: Results-driven mechanic transitioning to software development, eager to contribute effectively to a new team. Proven ability to overcome challenges involving implementing, maintaining, and testing complex systems

Education

Bachelor of Science in Software Engineering

December 2023

Schulich School of Engineering, University of Calgary, AB

- Cumulative GPA: 3.5 / 4.0 [Dean's List]
- Graduation With Distinction

University Preparation Program

January 2016 – December 2018

Cumulative GPA: 4.0 / 4.0

MacEwan University, Edmonton, AB

Projects

Unmanned Underwater Vehicle

September 2022 – April 2023

Python, MAVlink, drone prototype, and hardware

Unmanned Vehicles Robotarium Lab, Calgary, AB

- Created a distributed system capable of simultaneous underwater drone control and real-time IMU data display
- Designed a Python-based Graphical User Interface (GUI) that followed MVC and client-server architectural patterns
- Integrated communication between the GUI and 9 electronic devices (e.g., Raspberry Pi 3B and PX4 autopilot)

University Marketplace Web Application

September 2022 – December 2022

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

University of Calgary, Calgary, AB

- Developed a responsive web app in a team of 6; featuring item post-sharing, post-management, and real-time chat
- Built a RESTful API, client-server architecture, feature sets for three user roles, and simultaneous user support
- Utilized JWT authentication for secure access, enabling admin moderation (e.g., user banning and account deletion)

Skills

Languages: JavaScript, HTML5, CSS3, Python, Java, C, and C++

Frameworks: React.js, Node.js, Express.js, Flask, Tailwind CSS, Apache Hadoop, and Spark

Developer Tools: Git, NPM, Bash, Postman, and Jupyter Notebook

Database Management: Relational databases using MySQL and non-relational cloud databases such as MongoDB

Development Methodologies: Agile methodologies and User-Centered Design (e.g., Task-Centered Design)

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

Software Testing: Automated testing frameworks (e.g., JUnit, Pytest, and Selenium)

Additional Work Experience

D.G.C. Contracting Inc.

February 2012 – January 2016

Heavy Equipment Technician Apprentice

Spruce Grove, AB

- Implemented a hydraulic dump truck, drilling mud pumping system (over 50 gallons per minute), 40,000-pound capacity tractor hitch, TELUS telecommunication systems, and overhauled a Sellick S150 forklift
- Collaborated in a 3-person team or individually, executing maintenance and modifications on a fleet of 200+ units
- Demonstrated technical expertise by performing repairs, engine and body swaps, tuning, and fabrications