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☎ (705) 203-2534

in in/forrest-herman/

github/forrest-herman

SKILLS

◇ **Bilingual**: Fluent in English & French

◇ **C, C++**, **Python**, R, Git versioning

◇ HTML, CSS, **JavaScript**, React, SQL & basic Docker experience

◇ **Matlab, Simulink,** NI Multisim

◇ Experience working in Windows, MacOS and **Linux** environments with terminal

◇ Advanced experience with Adobe and **Microsoft Office** Suites including **Excel**

◇ 6 years of experience with **Autodesk Inventor**

◇ Lab experience using **PCB**, **multimeter** and **oscilloscope**

EDUCATION

Bachelor of Mechatronics Engineering & Society

Incoming 4th Year
McMaster University
Hamilton, ON

Mechanical Engineering and Control Systems:
◇ Flow, pressure, and Bernoulli equations, pressure, hydrolics
◇ Laplace domain analysis and feedback controller design

Data Structures, Algorithms and Language Concepts:
◇ Developed C/C++ programs
◇ Implemented algorithms

Software Development:
◇ Model driven design
◇ SDLC (Agile and Scrum)
◇ Fundamentals of modules and hardware hiding

PROJECTS

Pacemaker Software Design | Fall 2020
◇ **Led a team** of 4 engineering students to develop a pacemaker **software application**
◇ Programmed a simple pacemaker software using **Simulink** in **Matlab,** which interfaced with a PCB pacemaker via serial communication
◇ Designed and built a **GUI in Python** using Kivy libraries with use of **Git** versioning tools
◇ **Documented** entire process including user manuals and **testing cases**

3rd Place, Senior Design | McMaster Engineering Competition | Fall 2020
◇ Used strong **time management skills** while **working under pressure** in a 6 hour time constraint to learn **Arduino** programming
◇ **Collaborated** in a team of 4 working on an **iterative design** through testing

Digital Circuit Design Project | Spring 2020
◇ Implemented a **digital circuit** using **logic gates** to flash a 7 segment display with a specific sequence of numbers
◇ Created a circuit simulation for the design using **Multisim** to verify a working solution

Delta Hacks Hackathon Participant | January 2020
◇ Implemented HTML, CSS and JavaScript while creating a website including an api
◇ Streamlined **problem-solving skills** brainstorming a project direction with my team

WORK EXPERIENCE

Web Developer
Atomic Inc. **|** May 2021 – Current
◇ Developed sites based on Bootstrap & Vue.js, with web responsivness as a main objective
◇ Worked with Python DJango backend to build out website databases

Communications Assistant
McMaster Faculty of Engineering Outreach Team **|** Sept. 2019 – 2020
◇ Worked autonomously and **collaboratively as a member of a team** with collective goals
◇ Demonstrated ability to **work well under pressure** while capturing photo and video content at faculty events
◇ **Responded to feedback** while editing photo & video content for promotional purposes

Coordinator
Municipality of Powassan Swimming Pool **|** Summer 2019
◇ **Oversaw a team of 4 staff and provided feedback** and guidance to help them improve in their role as swimming instructors/lifeguards
◇ Displayed **critical thinking** ability while instructing swimming lessons to children of all ages (class size 6-10) and providing ongoing feedback

EXTRACURRICULARS

Musician | 2007 – Current
◇ **Violinist:** 14 years dedicated to the study of classical violin and fiddle
◇ **Composer:** 3 original instrumental pieces for the violin
◇ **Performer:** as a soloist and as part of an orchestra ensemble

Athlete
Competitive skiing, swimming, running, archery, and most recently, **fencing on the McMaster varsity team**

Hobbies
Web design
Photography
Videography
Graphic design
PC builds
Reading