Jeremy Langner

Software Engineering Student

Skills

Programming Languages: Java, Python, C, SQL, HTML, CSS, Golang, bash, Git

Technologies and Frameworks: Version control, Unit testing, Linux/Unix, DBMS, Flask, STM32, various IDEs

Soft Skills: Collaboration, Communication, Responsibility, Integrity, and Problem Solving

Education

McMaster University

Hamilton, ON

Software Engineering CO-OP Level III,

September 2019 - Present

Academic Achievements: Deans Honour Roll and Top 15% of Engineering I, Presidential Entrance Scholarship

GPA: 3.7/4.0

Related Coursework: Principles of Porgramming, Data Structures and Algorithms, Software Design I, Discrete Math

Technical Experience

McMaster Formula Electric Software Developer

October 2020 - Present

- Developed testing interface modules to analyze live data transfer between a Raspbeery Pi and an accelerometer to confirm hardware functionality.
- Modules implemented with Python to utilize Raspberry Pi's SPI, I2C, and Uart serial communication ports.
- Followed a rigorous and agile modern software development plan and execution.
- Formal practices included: Requirements outline, design specification, formal outline, UML diagrams, followed proper coding practices, rigorous testing, and regular code reviews.

Back to Hacking 2021 Virtual Hackathon Participant

November 2021

- Worked with a novel team formed at the virtual event to create a functioning web application within 48 hours.
- The web application takes user input and checks for balanced parenthesis from an uploaded file or string input.
- Designed the back end of the web application using Flask, Python, and a database library SQLAlechmy.
- Aided with the front end development with html to integrate the front end with the back end.

McMaster Engineering Competition Finalists

November 2019/2020

- In 2020, collaborated virtually to create a series of independent Rudy Goldberg machines and formally present each system with a focus on virtual communication and presentation.
- In 2019, worked alongside 3 peers to plan, build and present a physical device designed to solve a client's problem while ensuring timing and budget constraints are met.

Physical Mouse Attachment

September 2019 - December 2019

Engineering Practice and Profession Academic Project

- Designed and built an ergonomic mouse attachment prototype for a client with impaired mobility for personal use.
- Collaborated with 3 members to brainstorm, plan, model, develop prototypes and construct a final prototype presented to Professors.

Work Experience

Simcoe County Roads Dept. Student

May - September 2020/2021

Ramara, ON

- Demonstrated strong responsibility and task management skills for extended construction projects.
- Followed proper safety protocols and time commitments to ensure a satisfactory end result.
- Constant collaboration skills while working with co-workers, local homeowners and travellers.