Jeremy Langner

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github.com/jlangner15

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

Technical Experience

McMaster Formula Electric Software Developer *October 2020 - Present*
Develop specific testing interface modules for on board Raspberry PI data transfer with an accelerometer.

- Live data transfer from approved hardware to confirm functionality using communication protocols.
- Modules implemented with Python to utilize Raspberry Pi's SPI, I2C, and Uart serial communication ports.
- Follow a rigorous and agile modern software development plan and execution.
- Formal practices include: Requirements outline, design specification, formal outline, UML diagrams, following proper coding practices, rigorous testing, and regular code reviews.

Back to Hacking 2021 Virtual Hackathon *November 19-21 2021*
Worked with a novel team formed at the virtual event with the goal to learn a new web application framework to create a functioning web application able to take user input and run back end python scripts accordingly

- Built a functional web app that checks for balanced parenthesis from an input in the form of a string or an uploaded file.
- Developed the back end of the web application using Flask framework, Python, database library known as sqlalchemy.
- Aided the front end development with html and css and interlacing the backend with front end.
- Link to the Devpost submission https://devpost.com/software/parenthesis-validator

McMaster Engineering Competition Finalists *November 2019/2020*
Competed in the McMaster Engineering Competition for two consecutive years. The MEC is typically an in person group project for engineering students designed to collaboratively solve a particular problem within a single day.

- In 2019 our group had to plan, build and present a physical device based on a given client problem statement and follow timing and budget constraints.
- In 2020 our group had to create a series of independent Rudy Goldberg machines and formally present each system with a focus on virtual collaboration and presentation.

Engineering Practice and Profession Academic Project *September 2019 - December 2019*
Collaborated to develop a functioning mouse attachment for a client with impaired mobility to allow her use a mouse effectively again.

- Group project consisting of 4 members to brainstorm, plan, model, explore technologies, develop prototypes and construct a final prototype.
- Complete a final report and create a presentation outlining the whole design process with a demonstration of the final product to Professors and Teaching Assistants

Work Experience

Simcoe County **Ramara ON**
Roads Dept. Student *May -September 2020.2021*

- Demonstrated strong responsibility and task management skills for extended construction projects while always following proper safety protocols and on time to ensure a satisfactory end result.
- Constant improvement of collaboration skills via close work with fellow co-workers, local homeowners and travellers throughout Simcoe County

McDonalds **Orillia ON**
Crew Member *April 2016 - September 2019*

- Developed strong communication, collaboration and interpersonal skills while serving guests
- Strengthened immediate problem skills through guest interactions to properly handle and inquiries or issues