

Manuel Lemos

BE in Mechatronics. Results oriented software developer with more than 2 years experience in analysis, design, development, testing, and implementation of various software systems. Adept at designing and implementing applications with usability and performance in mind.

☎ (289) 230-6593 ✉ mannylemos@outlook.com 🌐 Portfolio 🌐 LinkedIn Profile 🌐 GitHub Profile

Skills

- Python, C, C++, VBA, Java, Excel
- Database Design, SQL Queries
- Git Version control
- Embedded Systems
- AutoCAD
- Excellent Communicator and Presenter
- Collaborative Team Player
- Highly Organized
- Multithreaded Programming
- Testing

Education

Bachelor of Mechatronics Engineering Co-op
McMaster University

2023
Hamilton, ON

- 3.8 GPA (10.6 on 12-point scale)

Work Experience

Business Intelligence Developer – Operations Co-op
INDAL – Curtiss-Wright

05/2021 - 08/2022
Mississauga, ON

- Designed performance indication models by applying key principles of computer science, engineering, and mathematical analysis.
- Modified existing software to correct errors, upgrade interfaces, and improve performance.
- Researched, designed, and implemented scalable applications for information identification, extraction, analysis, and reporting. Reduced time spent on reporting over **80%**.
- Consulted key stakeholders to develop a custom scheduling application. Rigorously investigated, quantified, and documented scheduling decision making. Drastically improved the productivity of master schedulers.

IT Consultant
Hoffer Mechanical

07/2017 - 08/2020
Hamilton, ON

- Proctored training via in-person and online venues for software implementations.
- Offered software related technical support through various communication channels.
- Developed an application to streamline job costing, decreasing employee time spent by over **50%**.
- Implemented a cloud based SDS **database**.
- Created an **Angular** application to replace an outdated website.
- CAD Modelling and drawing package creation in Autodesk **Inventor** and **AutoCAD**

Projects

Bicycle Ride Assist 🚲

09/2022 - 04/2023
Hamilton, ON

Academic – McMaster University

- Conceptualized and delivered a real time bicycle mounted ride monitoring device.
- Developed a multithreaded python program to drive real time data collection, video recording, crash detection, and rear vehicle detection.
- Collaborated with stakeholders to select ambitions, but realistic milestones on pre-release project development.
- Award-winning demonstration at <http://youtu.be/2H2faZxTyGI>
- James Dyson award candidate

Technologies: Git, Python, Multithreaded, Arduino, I2C, Serial, FFMPEG, OpenCV, Autodesk Inventor.

Pacemaker

Academic – McMaster University

10/2020 - 012/2020

Hamilton, ON

- Implemented a responsive pacemaker system on a K64F MCU.
- Coordinated the development of a Simulink model capable of interfacing with a Vue/Electron application in real time through a serial port.
- Aided in the development of a Vue/Electron application capable of performing telemetry with an MCU in real time through a serial port.

Technologies: Simulink, K64F, Serial, Node.js, Vue.js, Electron, Mongoose, Express, GAE, MongoDB, Git