MANUEL LEMOS

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

EXPERIENCE

MAY 2021 – AUGUST 2022

BUSINESS INTELLIGENCE DEVELOPER - COOP, CURTISS WRIGHT

Designed, implemented, and maintained a suite of Key Performance Indicators.
- Developed informed statistics to drive strategic business decision making.
- Created SQL queries to source data from an Oracle Business System.
- **SQL, VBA, Excel, PowerBI**

Conceived and spearheaded an interdepartmental project to **develop automated tools and reports.**
- Virtually eliminated time spent on manual data entry and manipulation.
- Improved interdepartmental communication via automated report synchronization and auto mailing.

Developed a VBA Module library.
- Applied fundamental concepts of software design.
- Testing standards, naming conventions, and thorough documentation were enforced.

Independent Capital Expenditure Project.
- Constructed in-house solutions to high-cost vendor operations.
- Determined the cost and timeline of implementation.
- Conducted an economic analysis and created a business case for the expenditure with recommendations.

JULY 2015 – AUGUST 2020 (SEASONAL)

JOB QUOTING AND IT SOLUTIONS, HOFFER MECHANICAL

Quoted projects.
Implemented a cloud based SDS database.
Programmed an automated job costing application to retrieve product pricing from vendors.
- **Python**, Excel, User Interface

Front End Web Development
- Created an **Angular** application to replace an outdated website.

CAD Modelling in Autodesk **Inventor** and **AutoCAD**

EDUCATION

SEPTEMBER 2018 – APRIL 2023

BSC MECHATRONICS ENGINEERING, MCMASTER UNIVERSITY

3.8 GPA (10.6 on 12-point scale)
President's Award Scholarship Recipient
Provost Honour Roll

SKILLS

PROGRAMMING

- Python
- C
- JavaScript
- Verilog
- HTML + CSS
- Angular
- SQL Server
- Visual Basic

SOFTWARE

- Git
- VSCode
- Eclipse
- Office 365
- GitLab
- Royal TSX
- MobaXterm
- Google Suite

LAB

- Soldering
- Arduino
- Multimeters
- Oscilloscopes

PROJECTS

SEPTEMBER 2022 – APRIL 2023

CYCLOPS RIDE ASSIST, CAPSTONE PROJECT AT MCMASTER UNIVERSITY (TEAM OF 5)

Source Code

An all-in-one bicycle mounted ride monitoring device. It provides users with rear vehicle detection, early collision avoidance warning, crash detection, video recording, and ride data logging. I played a key role in every facet of this project's design, implementation, and documentation. I gained significant experience operating in a git workflow, writing optimized and understandable code, designing and assembling circuits, and creating robust 3D models.

Technologies: Git, Python, LiDAR, Serial, Accelerometer, I2C, Video Capture, FFMPEG, OpenCV, Inventor, Slic3r, 3D printing, soldering.

OCTOBER 2020 – DECEMBER 2020

PACEMAKER, ACADEMIC PROJECT AT MCMASTER UNIVERSITY (TEAM OF 5)

Source Code

A responsive pacemaker system implemented on a K64F MCU.

I was the driving force behind the development of a Simulink model capable of interfacing with a Vue/Electron application in real time through a serial port.

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