# **Reginald Marr**

## **Embedded Software Developer**

# **EXPERIENCE**

# Embedded Software Designer - New Product Integration

#### L3Harris-Wescam

## Jan 2020 - Oct 2022

♥ Hamilton, Ontario

- Designed a python/rust framework to support automated testing and analysis of MX systems.
- Developed capabilities to streamline conversion of text-based documentation into PDF, Powerpoint and static website formats.
- Led software development/project coordination for both NPI and sustaining.
- Collaborated across engineering disciplines to develop and refine lens and laser sub-assembly for advanced EO products.
- Performed collection and analysis of complex systems during in-field flight tests.

## **Embedded Software Designer - Sustaining**

#### L3Harris-Wescam

May 2018 - Dec 2019

- Provided support triaging bugs found during pre-shipment verification.
- Acted as inter-department liaison to solve logistical issues for customer deliveries.
- Developed automation tooling using python and web-based technologies to optimized various workflows.
- Generated documentation and improvement proposals for legacy software components.
- Utilized TDD training to develop robust bugfixes and improvements to legacy software.

## **Tech Assistant**

#### **McMaster University - The Learning Factory**

May 2017 - Aug 2017

♥ Hamilton, Ontario

- Responsible for process design, DCS system integration, hardware installation, and HMI development.
- Developed a product to track part/tool utilization using custom RFID hardware developing software using embedded C, C#, and MySQL.

### **Project Coordinator**

#### **Airtron Canada**

feb 2016 - Sep 2016

- ♥ Missisauga, Ontario
- Designed and developed raspberry pi based relay to provide logging of environmental variables using python and custom REST API.
- Assisted in creating a proposal for a biogas cogen to convert food and animal waste into low grade electricity and high grade heat.
- Provided estimation support on energy services contracts involving the offset of GHG's via load balancing, HVAC system improvements, and more.

# **ABOUT ME**

I am first and foremost most proud of my ability to collaborate with peers across a variety of disciplines (and a variety of physical locations) to produce something better than the sum of our individual contributions.

Additionally I pride myself on my ability to grind away at complex problems, break them down, and define their atomic components.

By doing this I am able to develop robust solutions which solve not just the specific task at hand but provide adaptability to solve the problem in a general sense.

# **EDUCATION**

# B.Tech - Automation Engineering Technology McMaster University

♥ Hamilton, Ontario

- Capstone
   Developed G-Code Generator Cross platform application (Qt & C++) from 3D CAD models for novel metal 3D printing process.
- Level 600 Project
   Developed a neural network and network industrial system for modeling and controlling the distillation of ethanol.
- Completed 16 Months of Co-Op

# Adv.Dip - Chemical Engineering Technology

# Mohawk College

math display="block" | Sep 2013 - Jun 2018

Hamilton, Ontario

## Certificate - Business Management

### **Mohawk College**

♥ Hamilton, Ontario

# **SKILLS**

- Languages
   C, C++, Rust, Python, SQL, Matlab
- Developer Tools Git, Docker, Jenkins, Jira, Ansible
- Frameworks threadX, freeRTOS, POSIX, Emacs