

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

📍 Hamilton, Ontario

- 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

📍 Mississauga, 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 my peers across a variety of disciplines (and across 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 - Process Automation

McMaster University

📅 Sep 2013 – Dec 2017

📍 Hamilton, Ontario

- Completed 16 Months Co-Op
- 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.
- Received additional CIM-accredited Business Management Certificate.

AdvDip - Chemical Engineering Technology

Mohawk College

📅 Sep 2013 – Dec 2017

📍 Hamilton, Ontario

Skills

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