# **ROBIN MURPHY**

## Computer/Hardware Engineering Student

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**♥** Newfoundland, Canada

O https://github.com/rpmurphy27

# **EXPERIENCE**

# Hardware Developer CoreAVI

🗎 Sept. 2019 - Dec. 2019

- Ottawa, Ontario
- Developed skills in hardware design and debugging, using company standards and ensuring designs correspond to VITA standards.
- Debugged CoreAVI graphical processing module
- Created Design Verification and Acceptance Test reports
- Completed hardware level debugging while troubleshooting boot up errors on a Infineon Power Management Integrated Circuit.
- Developed a embedded Excel application to interface a Mentor Graphics bill of materials with ARAS Innovator. Saved CoreAVI an estimated 250.000 dollars.

## **Project Planning Engineer**

#### Cahill-Ganotec - [The Cahill Group]

🛗 Jan 2019 - May 2019

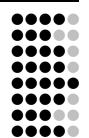
- Muskrat Falls, Newfoundland
- Project Management Job Design and Requirements, Daily tracking of job completion using Microsoft Excel and Kiewit OPS software to calculate worked hours versus estimated hours.
- CAD Designed Single Line Electrical schematics for electrical power distribution construction.
- Created wireless server for easy submittal of daily time-sheets.
- Performed on-site visits with electrical foreman.

# **ACHIEVEMENTS**

- Skills Canada Newfoundland Gold Medalist in Hardware Electronics
- Team lead for international 1st place winning poster and 3rd place Engineering Presentation at MATE Remotely Operated Vehicle competition

# **SKILLS**

C, C++, C#, Matlab, Windows, Linux Python, Java SolidWorks, MasterCAM, 3D Printing Written and Verbal Communication Time Management KiCAD PCB Design STM32Cube Programmer Infineon PowIRCenter



# **EDUCATION**

### Memorial University of Newfoundland

## **Bachelor of Computer Engineering**

Sept 2017 - Present

**♀** Co-Operative Program, Class of 2022

## **HONOURS & AWARDS**

- Hockey Newfoundland Wayne Mercer Memorial Scholarship
- O'Donel High School Technology Award
- Canadian Drone Pilot License

## **INTERESTS**

3D Printing Drones Hiking
Robotics Hardware Design
Arduino/Raspberry Pi

**Computer Programming** 

Hockey

## **VOLUNTEER WORK**

#### O'Donel High School

- Acting Mentor
- Taught Electronic Assembly and Computer Programming to students.

#### First Lego League

 Volunteered as judge for youth autonomous Lego robotics competition.

# **PROJECTS**

#### Single Board Computer - HUD

- ARM Cortex A53 Embedded Processor
- Intel Cyclone IV GX FPGA
- NXP NXh3670 Bluetooth Low Energy controller
- Single Board Computer created with a LS1012A processor connected to an Intel FPGA using PCIe. Computer contains 8GB of RAM, 32GB of internal storage, as well as various sensors and support for USB 3.0 and Bluetooth.
- Created schematic and Printed Circuit Board layout in KiCAD software

#### **Active Noise Cancelling Audio**

- Designed and created a Printed Circuit Board to actively noise cancel outside noise
- Programmed using an ARM Cortex-M4 STM32 processor
- Created schematic and Printed Circuit Board layout in KiCAD software

#### First Technology Underwater ROV

- Developing a underwater remotely operated vehicle for First Technology Association of Newfoundland and OceanQuest
- Remotely Operated Vehicle will be used to display Newfoundland marine life to high school students