

# Mitchell Stride

Electronics Engineering Student

Embedded Systems | PCB Dev.

Interested in electronics for embedded applications. Specialized in microcontroller based PCB Design. Working towards P Eng.



mstride@mun.ca

mitchellstride.com

+1(709) 541-3744

St. John's, NL, CAN



## Work Experience

### Hardware Design Engineer – Co-op

Curtiss-Wright – Embedded Defense Solutions

Jan 2019 – Apr 2019 | Ottawa, ON

- ⇒ Performed schematic, layout, and routing reviews for complex Intel and PowerPC based single board computers.
- ⇒ Created and performed DVT test plans on high speed signals using a 16GHz scope.

### Embedded Systems Engineer – Co-op

Kraken Robotics Inc. – Underwater Sonar & Robotics

Apr 2018 – Aug 2018 | St. John's, NL

- ⇒ Designed 10+ PCBs and 2 embedded stacks for underwater robotics in rugged environments using KiCAD.
- ⇒ Evaluated solutions in the lab using rapid prototyping techniques with STM32 Nucleo development boards.

### Cross Asset Engineering Assistant

ExxonMobil – Upstream Instrumentation & Controls

Sept 2017 – Dec 2017 | St. John's, NL

- ⇒ Designed analog and digital logic to optimize the Electrical Power Management System for an offshore oil platform.
- ⇒ Used the ABB 800xA software suite to create logic and HMI graphics for real time operator recommendations

### Hardware Verification Engineer – Co-op

Nokia – Telecommunications Hardware Testing

Jan 2017 – Apr 2017 | Ottawa, ON

- ⇒ Analyzed schematics of complex PCBs and created verification test plans to execute in the lab.
- ⇒ Soldered under a microscope and probed signals in a professional lab environment with proper ESD precautions.

### Website Developer

Blue Ridge Inc. – Outdoor Supply & Gear

Sept 2014 – June 2015 | Lewisporte, NL

- ⇒ Assisted in the Launch of an online shopping solution with the aid of Shopify.
- ⇒ Developed the website [www.theoutdoorsupplystore.com](http://www.theoutdoorsupplystore.com)

## Education

### Memorial University of Newfoundland

Bachelor of Electrical Engineering Co-op Program  
Third Year, Expected Graduation April 2021

## Technical

- ⇒ PCB Design
- ⇒ Schematic Capture
- ⇒ Layout & Routing
- ⇒ Prototyping
- ⇒ SMD Soldering
- ⇒ DVT & PVT
- ⇒ Embedded Systems
- ⇒ Microcontrollers
- ⇒ Adv. Radio License
- ⇒ 3D-Printing
- ⇒ CAD Modeling
- ⇒ Debugging

## Software

- ⇒ KiCAD
- ⇒ Eagle
- ⇒ Gerber Viewers
- ⇒ SPICE Simulation
- ⇒ Solidworks
- ⇒ C & C++
- ⇒ Mbed Framework
- ⇒ AVR Assembler
- ⇒ GIT, SVN
- ⇒ ABB 800xA

## Extracurricular

### Paradigm Hyperloop

Electrical Team | Sept 2017 - Present  
⇒ System Architecture, PCB Design

### Memorial SAE Baja

Electrical Lead | Jan 2018 - Present  
⇒ Designed Data Acq. System & Gauge Cluster  
⇒ FPV Video Sys. & LoRa communication

### IEEE

Student Branch Chair | Jan 2017 - Present  
⇒ Gave workshops on PCB Design, etc.  
⇒ Organized Events, Launched Stay Late & Make

## Projects

- ⇒ IOT Smart Home
- ⇒ Nixie Tube Clock
- ⇒ FPV Racing Quad
- ⇒ PCB Reflow Oven
- ⇒ Wireless PWR TX
- ⇒ Solar Tracking PCB
- ⇒ Auto Fish Feeder
- ⇒ Emerg. Light System
- ⇒ Relay Arduino Shield
- ⇒ RC Plane

## Interests

- ⇒ HAM Operator
- ⇒ Motorcycle
- ⇒ RC Vehicles
- ⇒ Foosball
- ⇒ Coffee
- ⇒ Camper
- ⇒ Electronics Hobbyist
- ⇒ Movies
- ⇒ PCB Design (30+)
- ⇒ Basket Ball