

# Riley Cambon

Vancouver, BC

riley.cambon@gmail.com • 778-938-6517

Portfolio: [www.rileycambon.me](http://www.rileycambon.me)

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## EDUCATION

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### University of Victoria

Bachelor of Engineering – With Distinction

Electrical Engineering with a specialization in Electronics

Sept. 2013 – April 2019

Victoria, BC

### BCIT

2012 Canadian Electrical Code certification course

Feb. 2015 - May 2015

Burnaby, BC

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## HIGHLIGHT OF TECHNICAL SKILLS

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- Design experience in embedded hardware, power supplies, and RF circuitry
- Proficient in Altium and managing component libraries
- Skilled at embedded programming in C/C++
- Adept with electrical test equipment and skilled at system troubleshooting
- Proficient in soldering, hot-air rework techniques, and cable assembly
- Experience with SolidWorks and AutoCAD
- Knowledgeable with 3D-printing and rapid prototyping
- Practiced technical writer with experience creating test instructions and user manuals

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## WORK EXPERIENCE

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### Electrical Engineer

Norsat International Inc.

Aug. 2019 – Present

Richmond, BC

- Team lead and electrical/firmware engineer for Redundant Switch (RSW) development
  - Coordinated an interdisciplinary team of mechanical, software and electrical engineers
  - Developed all electrical hardware and primary firmware for the RSW
  - Worked on product requirements and developed technical specifications
  - Performed electrical testing and validation of the RSW system
  - Worked with the Project Manager to develop project timelines
  - Successfully brought the project from concept to customer deliverable
- PCBA designer for RF, Power, and control applications using Altium Designer
- Provided production support and electrical troubleshooting on satellite communication equipment
- Responsible for tracking and managing production non-conformance reports
- Co-chair of Social Committee where I planned and led team building activities and company events

### Electrical Designer Co-op

Avigilon

May 2017 – Dec. 2017

Vancouver, BC

- Worked on circuit design and PCB layout using Altium Designer
- Performed circuit debugging and high-speed signal integrity testing
- Conducted product verification and troubleshooting for EMC compliance
- Performed electrical modifications to prototypes and assisted with thermal testing

**Design Engineer Co-op**  
PBX EngineeringMay 2016 – Aug. 2016  
Victoria, BC

- Provided electrical consulting services for roadway and commercial projects
- Assisted with control systems coordination and planning
- Coordinated with government organizations and clients to verify design requirements
- Created quality management documents for drawing submissions

**Electrical Designer/CAD Operator**  
Roy Campbell Ltd.Sept. 2015 – Dec. 2015  
Vancouver, BC

- Applied electrical theory to power distribution design for commercial buildings and projects
- Used AutoCAD for drafting electrical schematics, elevations, and layouts
- Assisted with project coordination and client meetings
- Performed lighting simulations and calculations

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**PERSONAL PROJECTS**

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**Signalight**

This device is a gesture-controlled hand signal illumination wearable for better hand signaling visibility while cycling. I designed, built, and programmed a PCBA which includes an AVR microcontroller, 3-axis accelerometer, single button interface, ambient light sensor, and lithium battery charger.

**Multi-effect DSP guitar pedal**

This project is a portable guitar effects pedal with OLED display and user inputs. I designed and built a STM32 based PCBA, which includes additional SRAM, codec, input filter, and lithium battery charger. I also implemented an algorithmic reverb in C/C++ as a proof of concept using FreeRTOS.

Please visit [www.rileycambon.me](http://www.rileycambon.me) for additional projects and details.

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**Clubs and Certifications**

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**UVic AERO**  
Electrical team

Sept. 2014 – Dec. 2018

**Amateur Radio Operator License**  
Advanced – VA7FLA

Dec. 2016

**2012 Canadian Electrical Code Certification**

May 2015

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**REFERENCES**

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References available upon request.