

Riley Cambon

Vancouver, BC

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Portfolio: www.rileycambon.me

EDUCATION

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

HIGHLIGHT OF TECHNICAL SKILLS

- 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

WORK EXPERIENCE

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

PERSONAL PROJECTS

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 for additional projects and details.

Clubs and Certifications

UVic AERO
Electrical team

Sept. 2014 – Dec. 2018

Amateur Radio Operator License
Advanced – VA7FLA

Dec. 2016

2012 Canadian Electrical Code Certification

May 2015

REFERENCES

References available upon request.