

Kyle Cathers

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Dependable and detail-oriented electrical engineer with experience working in multiple technical industries. Able to communicate and collaborate effectively with software developers, engineers, coops, and managers to develop and troubleshoot software and hardware projects. Passionate about solving technical problems, working in fast paced environments using modern tools, and achieving big goals in a motivated team.

Technical Skills:

Software

Javascript, HTML, CSS, Python, C/C++, Git, GitHub, Chrome DevTools, npm, React, Vite, Webpack, Linux, VSCode, JetBrains, Jira, Arena PLM, AutoIT, Tortoise SVN

Hardware

Circuit design, PCB layout, schematic capture, Altium, LTSpice, soldering, lab equipment, VHDL

Experience:

➤ Electronic Engineer

Sep 2021 - Present

- MKS Instruments - **Richmond, BC**
 - Configure software for new version of a position sensor for the customer's Vistara platform
 - Develop various temperature and position sensing products with the electrical and software team
 - Lead the design of an automated testing and programming jig, improving sensor product throughput
 - Test initial prototype of a new temperature sensor concept at the manufacturing site

➤ Electrical Engineer

Jan 2020 - May 2021

- Precision Micro Dynamics Inc - **Victoria, BC**
 - Developed C++ scripts to automate motor drive testing
 - Researched, designed, and tested power and mixed analog/digital PCBs with the hardware team
 - Created test plans, procedures and mod instructions for the board assembler
 - Documented projects/tasks into an ISO-9001 compliant quality management system

➤ Electronics Engineering Technologist Coop

Sep 2018 - Dec 2018

- Ocean Networks Canada - **Sydney, BC**
 - Assisted Marine Operations team with instrument testing and documentation
 - Troubleshoot, wired, and maintained various undersea instruments

➤ **Hardware Engineer Coop**

Jan 2018 - Aug 2018

- Intel Corporation - **Vancouver, BC**
 - Validated Intel's SSD power electronic chips in a lab environment discovering over 100 bugs in the first stepping of a new PMIC, reducing development cycle time and costs
 - Implemented new test GUI features, specified electrical components, and designed regulator PCB

➤ **Equipment & Reliability Engineer Coop**

Sep 2016 – Dec 2016

- Syncrude Canada Ltd- **Fort McMurray, AB**
 - Completed engineering packages including an MOV replacement and a Multilin relay upgrade
 - Performed various reliability tasks (BoM creation, cable diagrams, data collection, incident reporting)

🌈 **Education:**

- **B.Eng in Electrical Engineering**, *cum laude*
University of Victoria, Victoria, BC
- **Computer Architecture Project:** Microprocessor Design Project
Designed a 16-bit pipelined CPU onto an Artix-7 FPGA in VHDL
- **Capstone Project:** Robot Arm Control System
Led Arduino programming of a PID control system in C++

Side Projects:

- Portfolio Site
- Weather App
- To Do List
- Restaraunt website page
- Calculator
- Games such as tic-tac-toe and rock paper scissors

🌈 **Extra-Curricular Activities:**

- Powerlifting, best lifter at the BCPA Summer Open
- Guitar
- Chess
- Cooking