

Jordan Lee

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🏠 Richmond B.C.

✉ jordan.lee1299@gmail.com

Skills

Electrical

- Lab: oscilloscope, function generator, multimeter
- PCB layout: Fritzing, Altium
- Simulation: Matlab, Simulink

Computer

- Software Languages: C, C++, Java, Assembly, JS, HTML
- Hardware Design Languages: Verilog, System-Verilog, VHDL

Mechanical

- CAD: AutoCAD, Inventor, Solidworks, OnShape
- Machining: lathe, mill, welding
- Rapid prototyping: 3D printing

Personal Projects

Robotic Arm

JAN 2020 – PRESENT

- Designed using SolidWorks 2 custom stepper motors capable of outputting 50 N*mm of torque
- Designed PCB to implement commutator circuit and PID controller
- Programmed PID controller to Arduino UNOs to control motors using optical encoders

UAS Payload System

AUG 2019-PRESENT

- Designed and fabricated an autonomous unmanned ground vehicle guided by GPS location
- 3D printed and manufactured a passive braking system in order to drop a rover 100ft safely
- Designed a PCB and implemented PID controller for an active braking option to stabilize drop

PIC32 Metal Detector

JAN 2020 – MAR 2020

- 3D printed and designed a metal detector using a Colpitts oscillator and a PIC32 microcontroller
- Programmed the PIC32 ADCs to detect phase change of an oscillator with metal nearby
- Used interrupts to buzz an alarm and output to an LCD when detecting metal as a feedback

Student Design Teams/ Clubs

Electrical & Mechanical Designer/ Unmanned Aircraft Systems

AUG 2019-PRESENT

- Rapid prototyping of airdrop components using 3d printers, and machining custom parts
- Designing a fully functioning airdrop system and rover using CAD: OnShape and SolidWorks
- Programming and implementing Arduino based solutions using C
- Machining/using power tools: mills, bandsaw, drill-press etc.

McNaughton Chair / UBC IEEE

MAR 2019-PRESENT

- Using and training students of electrical lab: oscilloscope, function generator
- Created and manage a lab room for students to use towards personal/ school-based projects
- Providing advice for project implementation or fabrication to engineering students
- Built and manage Prusa 3d printers teaching students

Work Experience

Project Manager Assistant / RayPro Construction, Kelowna B.C.

JAN 2018-APR 2018

- Analyzed blueprints and architectural design plans for construction/demolition process
- Laid out and set up construction preparations for building foundation
- Used heavy machinery and power tools for demolition/construction process

Sales Associate/ Best Buy Canada, Richmond B.C.

MAY 2018-PRESENT

- Home theatre certified specialist: sales and customer service representative

Education

Bachelor of Applied Science: Electrical Engineering / University of British Columbia

- 3rd year electrical engineering student
- EXPECTED: MAY 2023