DORA YANG

dorayang2000@gmail.com | +1-647-835-3345 | www.linkedin.com/in/dyang22/ | Toronto, ON, Canada

EDUCATION

Bachelor's of Applied Science in Engineering Physics — Graduated May 2023
The University of British Columbia, GPA: 3.9/4.33 — Vancouver, BC, Canada

PROFESSIONAL EXPERIENCE

Electrical Engineer Co-op — May 2022 – Aug. 2022
D-Wave Systems — Burnaby, BC, Canada

- Responsible for the design and maintenance of quantum computing hardware.
- Updated the design of faulty power supply units (PSU) for 20 quantum computers with a microcontroller, UART communication, a graphical user interface, and a 3D printed enclosure designed in Solidworks.
- Decreased the verification time of PSU builds by 30% by designing a voltage monitoring test load.
- Automated stock monitoring for 2100+ supply chain components by programming a Python tool.

Instrumentation Engineer Co-op — May 2021 – Dec. 2021
Precision Nanosystems Inc. (Danaher) — Vancouver, BC, Canada

- Worked on a team developing a microfluidic medicine formulation device for commercial use.
- Created protocols, built jigs, and performed tests using sensors, hand tools and laboratory equipment to evaluate system performance, regulatory compliance and guide component selection.
- Decreased test data processing time by 40% and standardized analysis for 4 team members using Matlab.
- Maintained comprehensive records of test procedures and outcomes and delivered findings and design recommendations to project engineers.

Telecommunications Engineer Co-op — Jan. 2020 - Apr. 2020
Innovation, Science and Economic Development (ISED) Canada — Ottawa, ON, Canada

- Contributed to the technical regulations for deploying Wi-Fi and 5G devices in Canada's 6GHz band.
- Assessed and analyzed technical papers from 100+ telecommunications and RF stakeholders, focusing on data related to interference, device power, and methods for safeguarding incumbent services.
- Created and presented a Powerpoint update on 6GHz band initiatives to the Deputy Minister of ISED.

PROJECTS

Flooded Cave Rescue Communication System — Oct. 2022 - May 2023

- Collaborated with UBC Physics to create a under-water wireless communication device capable of sending text messages at a rate of 50 bits per second with a range of 80 meters.
- Designed a power circuit that supplied 200 Vpp at 200 kHz to drive an acoustic transducer and debugged using oscilloscopes, multimeters, probes and function generators.
- Boosted messaging system reliability and performance by 40% by writing error handling firmware in C++.

UBC Supermileage Design Team — Oct. 2020 - May 2023

- Led a team of students designing a dynamometer to test motors. Integrated a PID controller, a hysteresis brake, a microcontroller and sensors for speed monitoring, data collection and feedback control.
- Designed PCB schematics and layout in KiCAD for a board controlling vehicle accessories (horn, wipers), reducing size and increasing throughput by 50% and 40% respectively.
- Assembled and tested the PCB by conducting voltage and current measurements, signal integrity checks and functional testing of each component to ensure it met operational standards.

SKILLS

Software Python, MATLAB, C++, Microsoft Office Suite (Excel, Word, Powerpoint), Labview, Simulink

Hardware KiCAD, Altium, Soldering, Circuit Analysis, Oscilloscopes, Microcontrollers, Signal Generators