**Evelyn Zhang** | Project Portfolio | evelyn.dh.zhang@gmail.com | +1 (604) 652 4837 |

**University of British Columbia | B.A.Sc. Engineering Physics** (In progress) **| GPA 4.33/4.33**
**Trek Excellence Scholarship | Dean's Scholar**

## SUMMARY

Engineering Physics student with an interest in innovation, an enthusiasm for learning, and an attention to detail. Seeking opportunities to develop skills, contribute to a healthy work environment, and work on the frontier of science and technology. Dedicated and hardworking, and always undaunted in face of challenges. Outside of my studies, I enjoy performing on the saxophone, and playing Dungeons and Dragons.

## SKILLS

- Onshape, Fusion360, 3D printing, Wood & Metal shop operation, Laser cutting, Waterjet cutting
- PCB Schematic Capture & Layout, KiCAD, Altium, Arduino, Soldering, Multimeters, Oscilliscopes
- C, C++, C#, Java, Python, SQL, Azure, Excel, Google spreadsheets, MATLAB, Jupyter notebook

## EXPERIENCE

**UBC Bionics, Electrical Hardware Team Member |** Sep. 2025 – Present
Design team developing EMG prosthetic and BCI interface. Personally working on Battery Management System.

- Developing new BMS system, increasing space efficiency and overall performance
- Carefully selected ICs for battery diagnostics and telemetry data for microcontroller communication
- Modeling circuit with block diagrams and designing BMS in Altium for rapid manufacturing and iteration

**Transit Insight, Software Developer |** Jul. 2025 – Aug. 2025
Managed big data for a comprehensive performance-driven payment system in cloud data transition.

- Successfully developed SQL data deletion script and test case for cloud data using Azure Data Studio
- Automated data management processes using Azure Automation and PowerShell

**FIRST Robotics Competition, Electrician & Team Co-leader |** Jan. 2022 – Jun. 2024
International robotics competition to design and build a robot for engineering challenges.

- Utilized rapid prototyping techniques such as CAD, 3D printing, laser cutters, and wood & metal shop operation for efficient and immediate testing in high-intensity, short 4-week manufacturing period
- Effectively bridged needs of different departments for maximal productivity and reduced turnover times
- Independently designed and repaired quintessential custom circuits for robot function
- Participated in World Championship 2022 | Excellence in Engineering Award 2022 | Judges Award 2024

**Bell Advanced Vertical Robotics, Co-leader |** Sep. 2023 – Nov. 2023
International robotics competition simulating firefighting using drones and small robots.

- Successfully communicated subteam needs and managed deadlines for rapid work processes
- Awarded for engineering process and documentation presentation to judges panel
- Exemplary Team Award | Qualified for international championship as only Canadian team

## PROJECTS

**Rainwater Harvester Spreadsheet Model** | Feb. 2025 – Apr. 2025

- Complex system with hundreds of dynamically-updating parameters simulating five years of operation
- Optimized system performance using high-level, holistic design considerations
- Placed in top quartile in school design competition

**Arbitrary Function Generator PCB** | May 2025 – Jun. 2025

- Used KiCAD to produce a schematic capture and layout of an arbitrary square function generator
- Soldered and troubleshooted board elements using hand tools, including a multimeter and oscilloscope

**Autonomous Retrieval System** | Jan. 2025 – Feb. 2025

- Successfully built and competed with a mechatronic claw retrieval system
- Used ultrasonic sensors, Arduino microcontroller, and servos to efficiently automate retrieval process