Jaelyn Wan

Canadian Citizen ☎ 604-352-5504 ✉ jaelynwan@gmail.com in www.linkedin.com/in/jaelyn-wan

Third year Manufacturing Engineering student looking for January to August 2026 opportunities

Education

University of British Columbia — **September 2023 – May 2028**
Bachelor of Applied Science in Manufacturing Engineering (3rd Year Student) — *Vancouver, BC*

Work Experience

FreshPrep — **September 2025 – Present**
Engineering Intern (Co-op) — *Vancouver, Canada*
- Adjusted features on salad and RTE bowls to meet manufacturing and packing requirements, applied DFM principles including minimum wall thickness, draft angles, design tolerances, resulting in production-ready designs.
- Engineered hopper lids for filling machines ,taking into account production line workflow to improve ergonomics and efficiency for production workers.
- Coordinated with vendors to obtain quotes, assess manufacturing feasibility (injection molding/thermoforming), and select cost-effective options, ensuring designs meet quality and food safety regulatory requirements.

Hammock Helicopter — **June 2025 – August 2025**
Mechanical Design Engineering Intern — *Kuala Lumpur, Malaysia*
- Designed custom aircraft shipping fixtures (e.g. AS350 Tail Boom support, Rotor Blade Box, tow tug) by capturing precise measurements and developing 3D models in SolidWorks.
- Validated designs with SolidWorks FEA, optimizing structural integrity and material usage, and delivered GDT-compliant technical drawings to meet aviation agency standards.
- Developed full documentation packages (BOMs, vendor sourcing, CAD packages) to support fabrication and client delivery.

UBC Geering Up Engineeirng Outreach — **June 2021 – April 2025**
Curriculum Developer, ex. Camp Instructor — *Vancouver, BC*
- Co-developed new program content for summer camps and workshops, including Arduino, design thinking, and prototyping modules, helping to expand the reach of engineering education to K–12 audiences.
- Leveraged prior experience as a camp instructor in my design of engaging and age-appropriate curriculum for coding and engineering camps, ensuring hands-on activities aligned with camper learning outcomes.
- Mentored junior instructors and served as a positive role model to youth by fostering an inclusive, supportive learning environment.

Formula SAE (EV)

Validation Sensor Module | *Circuit Design, PCB Layout, Board Bringup* | *Altium Designer, LTSpice* — **2024 - 2025**
- Designed 4-layer PCB sensor simulation module featuring an STM32F4 microcontroller, emulating all critical sensor signals on the FSAE vehicle to enable full system testing without physical movement or ground contact.
- Developed the board to interface with both ends of the car's wiring harness, replicating real-time data from IMU, wheel speed, steering angle, and other subsystems to support bring-up, debugging, and validation of electrical and software systems.
- Led board bring-up and troubleshot power delivery, signal routing, and MCU startup issues, systematically verifying each subsystem from the schematic level to physical test points, ensuring stable and repeatable behavior.

Vehicle Wire Harness | *Electrical Routing, CAN & Sensor Integration* | *Solidworks Routing, RapidHarness* — **2023–2024**
- Designed and implemented the complete low-voltage wire harness for 4th generation FSAE vehicle, supporting key systems including sensors, CAN communication, and power distribution; ensured reliability and serviceability under dynamic vehicle conditions.
- Selected connectors, wire gauges, and protective components based on cost, load, vibration, and environmental exposure; performed crimping, labeling, and harness assembly using proper strain relief and routing practices.
- Created detailed wiring documentation including pinout diagrams, harness schematics and 3D model using a mix of RapidHarness and SolidWorks Routing, enabling seamless installation, debugging, and future revisions by other team members.

Skills

Mechanical: CAD (Solidworks), Finite Element Analysis (FEA), GD&T, Design for Manufacture/Assembly

Hands On: Milling, Lathe, TIG Welding, Soldering, Composite Layups

Electrical: PCB Design/Bringup (Altium Designer), Circuit Simulation (LTspice), Wiring (RapidHarness)