Howard Wen

e: hwen.hba2026@ivey.ca | **p:** (403) 890 5086 | **in:** howard-wen04

EDUCATION

Western University & Ivey Business School   **London, Ontario**
B.E.Sc in Mechatronic Systems Engineering & Honours Business Administration   Expected May 2027
- **GPA:** 3.95 / 4.0
- **Honours:** Dean's Honour List (2), Western Scholarship of Excellence, Jon and Nancy Love HBA Scholarship

Western Canada High School   **Calgary, Alberta**
Alberta Diploma & International Baccalaureate Diploma   September 2019 - June 2022
- **Overall Average:** 96% | **IB Diploma:** 41/45

EXPERIENCE

Northern Hail Project   **Olds, Alberta**
Field Operations Intern   May 2024 - August 2024
- Led development on IGLOOH – a hail velocity measurement instrument, and SimHail – an IMU motion tracker of simulated hail falls; presented product to leadership and led to an in-progress research paper
- Participated in severe hail storm chases and intercepts, deploying instrumentation and collecting hail data; notable collaboration with the Insurance Institute for Business and Home Safety on field deployments of instruments
- Participated in the August 5th hail storm damage survey of Calgary – one of the first large-scale coordinated forensic analyses of hail damage in the world – assessing damage and interviewing impacted residents

ArenaPetro   **Beijing, China**
Embedded Systems Verification Intern   May 2023 – July 2023
- Identified and fixed faulty wiring and PCB connections on Orion, an IMU device utilizing MEMS gyroscopes and accelerometers using multimeters, oscilloscopes, and SCI software
- Developed data visualization software to test the MEMS sensors, allowing for easy debugging and prototyping

Centre for Suicide Prevention   **Calgary, Alberta**
Data Management Intern   May 2022 – August 2022
- Spearheaded initiative to create a user-friendly Python program for inputting metadata, saving the company from needing to manually input information into 10,000+ files
- Digitized 8,000 library resources shelved at CSP with OCR, ensuring documented and robust archival

EXTRACURRICULAR EXPERIENCE

Testify.fm – Creator
- Created Testify.fm, a full-stack music web application with 5,000+ users and 50k songs pulled
- Designed the UI, logos, mobile features, and aesthetic using React and a Next.js frontend on Vercel
- Developed music generation algorithms using a Python/Flask backend on DigitalOcean

Fashion & Lifestyle Society – Menswear Stylist and Designer
- Collaborated with directors to curate, source, and style outfits in the the menswear runway for Fall/Winter 2023
- Co-designed Look 9 for the Spring/Summer 2024 runway; efforts included sourcing, patterning, cutting, and sewing clothing fabric, as well as various other tailoring and auxiliary design processes

SKILLS

- **Python:** smbus2, spidev, requests, tkinter, matplotlib, numpy, flask, pymongo, vtk
- **Other Skills:** SolidWorks, C, Arduino, JavaScript, React, MongoDB, PostgreSQL, Excel, PowerPoint
- **Interests:** reading, avant-garde fashion, skiing, piano, music