

Edmon Han

587-890-5901 | ehan54@uwo.ca | edmonhresume.work | github.com/hedmon1

EDUCATION

University of Western Ontario

BSc Computer Science | Ivey AEO (Advanced Entry, Ivey Business School HBA)

London, ON

Sept. 2025 – Expected 2030

EXPERIENCE

Robotics Team Captain & Software Lead

Western Canada High School Robotics

Sept. 2023 – June 2025

Calgary, AB

- Led a team of 6 through a two-year build cycle to a Top 5 finish at the Western Mechatronics City Tournament, delegating workstreams and running up to 5 weekly meetings against a fixed competition deadline
- Wrote and tested the C++ code driving the robot through both autonomous and driver-controlled play

Lead Swim Instructor

MNP Community & Sports Centre

Nov. 2023 – Aug. 2025

Calgary, AB

- Managed groups of up to 8 participants while ensuring the safety of 100+ swimmers weekly across ages 1–17 in a high-accountability environment
- Trained and mentored 5 assistant instructors to full independence; served as the primary client contact for parents, delivering progress feedback and resolving concerns

PROJECTS

Portfolio Backtester & Risk Engine | Python, NumPy, pandas

- Built a quantitative risk tool for equity portfolios with dynamic rebalancing logic and risk-adjusted performance metrics benchmarked against a buy-and-hold control
- Ran 10,000-path Monte Carlo simulations to quantify downside scenarios; validated inputs and documented assumptions so results were reproducible and auditable

StakeUp | React Native, Firebase, Firestore | stakeupapp.com

- Designed and enforced Firestore security rules governing read/write access, plus Apple, Google, and email authentication, for an app where users stake points and peer-verify each other's photo proof
- Built peer-verification controls to prevent self-approval of claims; live on TestFlight

Be Bird (Live on Roblox, 1,500+ downloads) | Roblox Studio, Lua, Motor6D

- Architected the game server-authoritative with lag-compensated validation so a modified client cannot manipulate outcomes; engineered a momentum-based flight system with energy-trade physics

Ink – Life Calendar (50+ loyal users) | React Native, Expo, TypeScript

- Shipped an offline-first iOS calendar (4,680-cell grid, local-only data persistence) solo from concept through App Store review; currently released on the App Store

LEADERSHIP, CASE COMPETITIONS & AWARDS

Semi-Finalist | Pitch The Future (Western Founders Network) & Ignite (PBSN)

Oct. – Nov. 2025

- Reached the semi-finals of two of Canada's largest university case competitions as a first-year, owning the analysis and presenting recommendations to judges under time pressure; 20+ cases analyzed

Winner, University of Calgary Engineering Competition

March 2024

SKILLS & INTERESTS

Technical: Python (NumPy, pandas), Java, C++, JavaScript/TypeScript, SQL basics, Excel, Git/GitHub

Risk & Controls: Access control design, authentication flows, server-side validation, data integrity testing, documentation of assumptions

Analytics & AI: Monte Carlo simulation, scenario & sensitivity analysis, AI-assisted development tooling

Business: Financial modeling, market sizing & feasibility analysis

Interests: Personal equity investing, Muay Thai, photography, mountain hiking