

EDUCATION

- **University of Toronto, St. George Campus** Toronto, Ontario
BASc in Engineering Science *July 2025 – May 2030*

EXPERIENCE

- **Ingenuity Labs Research Institute** Kingston, Ontario
Robotics Research Intern *May 2026 – August 2026*
 - **UAV Perception:** Researched real-time UAV target tracking and monocular depth estimation methods for autonomous robotics applications.
 - **Model Evaluation:** Evaluated computer vision models including YOLO, Depth Anything V2, MiDaS, and Depth Pro for embedded AI deployment under latency and compute constraints.
 - **Vision Pipelines:** Developed Python-based pipelines for object detection, depth inference, and spatial localization using monocular video streams.
 - **Technical Research:** Conducted literature reviews and technical analysis on multi-object tracking, 3D localization, and edge AI optimization techniques.
- **McDonald Institute & Carbon to Metal Coating Institute (C2MCI)** Kingston, Ontario
Summer of Science Participant *July 2024 – Aug 2024*
 - **Scientific Research:** Selected for a competitive interdisciplinary enrichment program focused on particle physics, astrophysics, and advanced materials research. Explored topics including neutrino physics, dark matter, nanotechnology, and detector systems through university-level lectures and laboratory discussions led by researchers and faculty.
 - **Technical Communication:** Developed and presented a research seminar on 3D-printed cancer-targeting nanotechnologies in collaboration with a graduate physics researcher, translating complex scientific concepts into accessible, audience-oriented presentations.
 - **Collaborative Learning:** Participated in a research-focused academic environment involving group discussions, scientific inquiry, and cross-disciplinary collaboration alongside secondary and post-secondary students pursuing STEM fields.
- **Frontenac Secondary School** Kingston, Ontario
Assistant Teacher & STEM Tutor *Sep 2023 – June 2025*
 - **Mentorship:** Provided one-on-one academic support across multiple STEM subjects, helping students strengthen problem-solving skills and improve overall academic performance.
 - **Teaching Experience:** Assisted in the delivery of science and health education lessons while adapting instructional approaches to support diverse learning needs.
 - **Quiz Design:** Designed interactive review materials and practice assessments for senior biology, chemistry, and physics courses to reinforce classroom learning and engagement.

CLUB EXPERIENCE & CERTIFICATIONS

- **Trivia Team Co-Captain (Sep 2023 – June 2025):** Co-organized fundraising trivia nights and led team preparation; competed in bi-monthly Ottawa tournaments and won 1st place at an International Trivia Match in Watertown, NY, broadcast on local television.
- **University of Toronto Formula Racing Team Member (November 2025 – Present):** Attended weekly lectures on the car's electrical system architecture, including safety features and control systems.
- **IEEE University of Toronto External Relations Associate (June 2026 – Present):** Acquired club sponsorship from companies like AMD, Qualcomm, RBC, Amazon, and Google.

AWARDS & GRANTS

- **Honour Roll x4:** Recognized for consistent academic excellence across all four years of secondary school.
- **Nisei's Student Club Bursary:** Awarded to one student of Japanese ancestry on the basis of financial need and academic merit.
- **Caribou Mathematics Contest:** Ranked Top 10 in the Limestone District School Board.

SKILLS

- **Research:** Qualitative inquiry, academic literature review, data collection and analysis, knowledge dissemination, research ethics principles
- **Technical:** Microsoft Office Suite (Word, Excel, PowerPoint), Python, Git, MATLAB, LaTeX, Onshape, Fusion360, Figma, Vercel
- **Languages:** English (fluent), Japanese (conversational)