

SAMUEL LI

samuel.li200615@gmail.com • (647) 768-8512 • <https://www.linkedin.com/in/sam-you-li/>

SUMMARY OF QUALIFICATIONS

Electrical Engineering student at the University of Ottawa with internship experience at a leading Canadian engineering consulting firm, specializing in power systems and electrical design. Skilled in hardware-software systems integration, wiring harness design, and sensor/actuator troubleshooting through hands-on work with Formula SAE. Demonstrated leadership as Vice-Chair of IEEE uOttawa, representative roles in the Engineering Students' Society, and technical lead on multiple design projects. Strong communicator with experience in client-facing environments, fluent in English and Mandarin, with conversational proficiency in French.

WORK/VOLUNTEER EXPERIENCE

Formula uOttawa

Ottawa, ON

Electrical Team Lead

November 2025 - Present

- Led the electrical architecture and integration of a land-vehicle platform with sensors, ECUs, embedded controllers, and data systems.
- Documented wiring harness architecture with full signal-level mapping in Excel; used documentation to track faults, root causes, and corrective actions.
- Led hardware-software integration across multiple microcontroller platforms for data acquisition/visualization, signal processing, and subsystem controls.
- Performed system-level verification and troubleshooting using oscilloscopes, Excel, Vector Network Analyzers, and ECU calibration software; resolved wiring, sensor, CAN bus, and actuator faults.
- Managed electrical projects end-to-end, coordinating with mechanical and data subteams to deliver subsystems for the vehicle platform.

BBA Consultants

Toronto, ON

Power T&D Intern

May 2025 - August 2025

- Developed an interactive geospatial platform mapping Canada's high-voltage transmission infrastructure, valued at \$150,000 CAD for business development and client attraction.
- Conducted an internal documentation audit and prepared technical, logistical and corporate documents for incomplete project packages.
- Produced electrical schematics, technical reports, and system diagrams under the supervision of licensed engineers.
- Gained extensive proficiency with Microsoft Excel and Office Suite while consolidating and presenting technical project data.

IEEE uOttawa Student Branch

Ottawa, ON

Vice-Chair

May 2025 - Present

- Represent over 3000 engineering students and oversee academic, media, and outreach initiatives, while managing communications and documentation across multiple subcommittees.
- Coordinated logistics for the Student Professional Awareness Conference, collaborating with industry partners such as Nokia, Stantec, Rohde & Schwarz, QNX, Nordion, NAV Canada, and Lockheed Martin.
- Assisted the Branch Chair in managing an executive committee of 13 members and subcommittee of 40 members, ensuring clear documentation of processes and accountability.

PROJECT EXPERIENCE

Shazam 4 Drones Hackathon: Drone Sniffer

Ottawa, ON

Sponsors: Kongsberg Geospatial, RMUS, AVSS, Invest Ottawa

November 2025 - November 2025

- Developed an AI designed to identify and classify drones based on auditory data, the AI was trained over the span of 10 hours using auditory data from a variety of drone, vehicle, aircraft, and munitions audio.
- Drone Sniffer won 4th place out of 87 teams from across Canada, with a solid 70.0% success rate.

Canadian Nuclear Labs

Ottawa, ON

Client Representative: Scott Read, Acting Manager at CNL

February 2025 - April 2025

- Led electrical and mechanical design for a CANDU Nuclear Reactor fuel channel sampling system, ensuring compliance with industry standards and client requirements.

EDUCATION

BASc Electrical Engineering and BSc Computing Technology

Class of 2029

University of Ottawa