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Education

University of Toronto

Sep. 2022 – May 2027

Bachelor of Applied Science in Electrical Engineering

Toronto, Ontario, Canada

- **GPA and Honours:** 3.7/4.0; Dean's Honour List; PEY Coop; Ontario Professional Engineering Scholarship

Relevant Courses

- Algorithm Design
- Data Structures
- Deep Learning
- Computer Architecture
- Computer Hardware
- Operating Systems

Skills

Languages: C, C++, Java, Python/Pytorch, SQL, MATLAB, Typescript/Javascript, Verilog, HTML, CSS, Assembly
Library/Frameworks: React, OpenCV, AWS, Linux/Bash, Docker, Git, Node.js, Bootstrap, Homebrew, JUCE
Technologies: Databricks, Autocad, Fusion 360, Altium, NI Multisim, Figma, Quartus, Lightroom, Photoshop, Illustrator

Work Experience

Magna International

Sep 2025 – Present

Machine-Vision/AI Engineering Intern

Toronto, Ontario, Canada

- Integrated with **R&D** team to optimize **machine vision** pipeline for automotive quality inspection with **98%** accuracy.
- Developed scalable data processing scripts using **Python/SQL** on **AWS** using **Databricks** for training/inference.
- Optimized pipeline with **OpenCV/PyTorch** in **RDP Docker/CUDA/Linux** environments for remote training.
- Facilitated daily standups with factory to assess **CVAT** annotation progress, resolve labeling issues, and delegate work.

Projects

Virtual AR Drumset | *Typescript, AR/VR, Hack The North*

Sep. 2025

- Built a hand-gesture controlled **AR** virtual drum in **TypeScript** using Snap Spectacles Lens Studio, similar to Unity.
- Guided 3 teammates created 3D assets, built gesture logic, and shipped a AR virtual drum in 36hr; winning **3rd** place.
- Engineered **WiFi/WebSocket** physical kick-drum to trigger audio on **QNX RTOS** to deliver realistic AR drumming.

Personal Website | *React, Git, Vite*

Apr. 2025 – May. 2025

- Developed a personal portfolio using **React** and **Tailwind CSS**, emphasizing clean **UI/UX** and responsiveness design.
- Adopted **DevOps** approach by implementing a **CI/CD** pipeline with Git, enabling automatic deployments to GitHub.
- Created interactive elements using custom **React** components to demonstrate creative **frontend** development skills.

Image Filter Classifier | *Python, Pytorch, Google Colab, AI*

Sep. 2024 – Dec. 2024

- Constructed an **AlexNet** inspired **CNN** to classify image filters (e.g., grayscale, sepia) with over 95% accuracy.
- Applied data augmentation and **transfer learning** on a custom dataset to improve generalization across filter types.
- Benchmarked performance against a baseline **SVM** using hand-crafted features (e.g., RGB histograms, LBP).

Leadership / Extracurriculars

IEEE University of Toronto Chapter

June 2024 – Current

Multimedia Director

Toronto, Ontario, Canada

- Composed social media posts and uniform designs using **Figma**, collaborating with the web team on **UX/UI** design.
- Organized **300+** students at hackathons, mentoring technical skills, hosting workshops, and overseeing participants.
- Promoted events through social media posts and short-form content, inspiring over **5000+** students and **500k+** reach.

aUToronto (Autodrive Challenge University of Toronto)

Sep 2025 – Current

Electrical Team

Toronto, Ontario, Canada

- Debugged PDSM **PCBs** on **Altium** that communicate signals from cameras, LiDARs and radar of autonomous vehicle.
- Validated vehicle power-distribution networks using **Redarc** systems to ensure reliable driving performance.
- Collaborated with the Systems team to flash controllers, verify communication interfaces, and ensure stable operation.

Activities & Interests

Activities: NewHacks/HTN Hackathon Winner/Organizer, Uber/Fantuan Driver, F!rosh, Vancouver Care Package
Interests: DJ | Photography | Electric Guitar | Amateur Radio | Hip Hop Dance | Acappella | Culinarian | Ice Skating