

Austin Luu

✉ austinowenluu@gmail.com

🏠 austinluu.me

📷 austinluu

📺 austin-luu

Technical Skills

Programming Languages Python, JavaScript, Java, C++, C, SQL, MATLAB, VBA, LaTeX, Octave, VHDL

Tools & Frameworks GIT, React, Next.js, jQuery, Node.js, HTML, CSS, Bootstrap, TensorFlow, npm

Misc. Jira, Notion, Figma, Adobe Photoshop, Microsoft Office, CRM, Power BI, Navision

Projects and Courses

Kabo | HACK THE NORTH 2020++ [🔗](#)

2021

- Designed and implemented a Discord bot for simulating karaoke with live pitch and lyrical correctness scoring
- Developed using **Python** and **JavaScript** for the back end and front end respectively. Utilizing Aubio, Numpy, SpeechRecognition, Pydub, LyricsGenius, and Wave libraries for audio analysis and Node.js, Discord.js, and PythonShell for interfacing

RUKPOP | LEAD WEB DEVELOPER [🔗](#)

2019

- Piloted design and development of end-to-end web applications for the University's "Korean Pop Culture" student organization
- Developed user-friendly mobile first web application utilizing **JavaScript**, **CSS**, and **HTML** managed on Bluehost

Parallel Computing Drone Swarm | PENNAPPS HACKATHON [🔗](#)

2018

- Built a hazard detection 2D mapping robot which collects thermal, moisture, and relative location data from two autonomous IoT ground drones
- Developed with: **Python**, **C++**, **MQTT Protocol**, Arduino 101s, laser cutting, and 3D printing

Vision Motion | THACKS2 [🔗](#)

2017

- Leveraged real-time computer vision using **OpenCV** on mobile devices to track and graph the projectile motion of an object

Experience

TOHacks | DATA ANALYST

Toronto, ON, Canada | Jan. 2022 — Present

- Working on increasing future participant submission rate through a data supported admission process

AlphaPoly Packaging | PROCESS ENGINEER

Brampton, ON, Canada | June 2021 — Oct. 2021

- Analyzed manufacturing operation data in PowerBI and Excel to redevelop STD operating procedures, forecasting a 65% reduction in operation downtime
- Developed end-to-end quality testing across all manufacturing departments reducing June-to-September quality cases by 31%

Celestica | PRODUCT DATA ANALYST

Toronto, ON, Canada | May 2019 — June 2021

- Initiated and managed Aerospace & Defense value engineering cost saving projects, reducing excess inventory by over 20% and expanding customer AVL portfolio by over 15%, leading to an annual cost savings of \$1.5 million
- Analyzed over \$5 million in customer portfolio data using PowerBI and Excel; identifying demonetized product developments and the impact of commodity price changes

Ryerson Rams Robotics | MECHATRONICS CO-LEAD

Toronto, ON, Canada | Sept. 2016 — June 2021

- Piloted development of dynamic force model simulations in **MATLAB**; increasing structural integrity by 35%: placing 2nd internationally at URC2019
- Led an agile team of 15 in design & development of an autonomous robot with PID control, developed in **C++**; placing 1st nationally over the 2018 & 2019 VEXU competitions

Education

DeepLearning.AI | DEEP LEARNING SPECIALIZATION

Remote | Dec. 2021 — Jan. 2022

- Neural Networks, Hyperparameter Tuning, Regularization and Optimization, Machine Learning Project Structure, Convolutional Neural Networks, and Sequence Models

Ryerson University | B.ENG IN MECHATRONICS ENGINEERING

Toronto, ON, Canada | Sept. 2016 — May 2021

- GPA: 3.70 | Dean's Honour List