

LYAM MILBURY

COMPUTER ENGINEERING STUDENT | HARDWARE HACKER | TECH ENTHUSIAST

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🌐 Lyam-Milbury

in Lyam-Milbury

EXPERIENCE

Front End Developer

📅 May 2018 - Present

Government of Canada

- Developed and maintained webpages and tools for the Spectrum Telecommunication Services (STS) branch, working primarily on creating complex interactive google maps.
- Harnessed geoJSON, KMLs, and JavaScript to lead an initiative to replace over five hundred outdated spectrum auction webpages into a handful of interactive maps, reducing database ROT and client frustration. Received Award of Merit from the Deputy Minister of the STS for this work.
- Worked with a passionate team in a collaborative environment, focusing on teamwork in order to meet time-sensitive deadlines.
- Utilized downtime to create a Java-based application for quick and simple generation of interactive google maps to reduce webpage turnaround time.

PROJECTS

Applying ML for TCP

📅 Fall 2021 - Winter 2022

Capstone Project

- Collaborated with a professor and two peers to conduct research, train, and evaluate different ranking models utilizing test case prioritization (TCP) in the context of continuous integration (CI).
- Main responsibility was conducting research on different machine learning (ML) anomaly detection models, utilizing Python 3 and the Pyod toolkit to train/evaluate and optimize the selected models, and analyzing/visualizing their results.
- Also took on the role of data analyst, performing feature selection on large data sets from open source projects.

catJAM - Discord music bot

📅 September 2021

Personal Project

- Developed a bot that can play high-quality audio from web-based mp4 videos in voice calls via user requests by leveraging NodeJS.
- Created with scalability and security in mind with multiple instances being active in different voice calls simultaneously.
- Hosted on an Ubuntu AWS EC2 instance to ensure a near 100% uptime.

Autonomous Greenhouse

📅 Fall 2020

Course Project

- Designed and built a prototype of an autonomous greenhouse that maintained optimal humidity, brightness, soil moisture and air quality levels with a team of two peers.
- Using Python 3, managed air quality control and ventilation. Converted sensor data into human-readable data, provided and managed an SQL database for sensor-to-sensor communication and designed/programmed a tkinter-based GUI for the database.
- Followed a realistic development cycle, including a design phase using finite state machines, use case diagrams and class diagrams.

EDUCATION

Carleton University

Bachelor of Computer Systems Engineering

📅 September 2017 - December 2022

SKILLS

Programming languages

JavaScript Python Java C
C++

Frameworks

TensorFlow Pyod AWS EC2
Node.js mongoDB React.js

Other skills

Machine Learning HTML CSS
SQL Microsoft Office Suite UNIX
Fluently bilingual (English/French)

HACKATHONS

Ottawa Global Game Jam 2022 - Ottawa

Participant

FrostByte game jam 2021 - Ottawa

Participant

Hack the 6ix 2018 - Toronto

Participant

Hack the North 2018 - Waterloo

Participant

INTERESTS

Cyber security

Keeping up with the latest trends and news regarding cyber security. Novice pen-tester constantly practicing to improve my skills.

Game development

Hobbyist game developer currently working on an indie project with a small team.

Smart home DIY

Obsessed with automating the mundane elements of a home, including temperature maintenance, electricity consumption monitoring and voice activated lighting/curtains.