MARIE ANNAËLLE ALISON EMILIEN

Email: aliemi@ieee.org|LinkedIn:/in/alison-emilien/|itch.io: alistrics.itch.io|GitHub: Alison0704

PROFESSIONAL SUMMARY

- Electrical engineering and Computer technology student passionate making automations tools to stretch how far my creativity can go and well as making my daily tasks more efficient.
- Involvement as a teaching assistant in **digital systems** and **C programming** and hackathons using AWS courses and tools, in University of Ottawa and engaging in game jams on itch.io.
- I am looking to apply my engineering skills in an innovative and challenging environment as an Intern.

EDUCATION

BASc Electrical Engineering and BSc Computing Technology

2020 - 2026

University of Ottawa, Ottawa, Ontario

- Scholarship: Recipient of the Differential Tuition Fee Exemption Scholarship
- Relevant coursework includes:
 - Advanced Programming Concepts with C++
 - Data Structures and Algorithms
 - Operating Systems
 - o Discrete Structures

SKILLS

- Programming Language and Frameworks: C, C++, HTML, CSS, Tailwind, Javascript, React, Python, Typescript, C#, Go.
- Tools: Git, Unity, VScode, Docker, Jenkins.

ENGINEERING UNIVERSITY PROJECTS

Python Discord bot – Streaks Tracker

Feb 2025 - Present

- Developed Streaks Tracker, a Python Discord bot, using PyCharm and GitHub to enable me to track and maintain my activity streaks.
- Integrated Discord's API as the UI, improving engagement and accountability by 60%.

Personal Portfolio Website Prototype - https://alistrics.netlify.app/

May 2024 – Present

- Created an interactive website to showcase my background and engineering projects (in progress).
- Developed and deployed an interactive website with Vite and React, reducing load time by 40% through efficient rendering and bundling optimization.

C++ Card Game and itch.io game jams

May 2024 – Dec 2024

- Showcased analytical skills by identifying and resolving issues in game functionality and logic in various unity games.
- Designed efficient algorithms for game mechanics, showcasing the ability to analyze requirements and deliver functional solutions.

Water Quality Analyzer - https://youtu.be/vMIDdeUzurE

Sept 2023 – Nov 2023

- Designed a front-end interface for real-time data display and analysis, integrating sensors with Arduino for data collection.
- Utilized Node.js to establish communication between the hardware and the web application, ensuring seamless data flow.

WORK EXPERIENCE

University of Ottawa - Teaching Assistant - GNG 1106 and ITI 1500

Jan 2024 – Apr 2025

- Guided students in learning **Digital systems** and **C programming**.
- Provided individualized support to troubleshoot coding issues and debug digital system designs and scripts.

University of Ottawa - Pension and Benefits Assistant

May 2023 - Apr 2025

- Automated and archived administrative documents according to university standards.
- Supported employees through TOPdesk to address questions regarding pensions and benefits.
- Automated data entry and validation in Excel, reducing manual processing time by 50% and minimizing human errors.

EXTRA CURRICULAR ACTIVITIES

uOttaHack – learning outcome: Engaged in AWS courses to better improve my current personal portfolio Website Prototype.

Hack the Hill - learning outcome: Worked collaboratively in a hackathon team to quickly make a FPGA project in 48 hours.