IAIN MACDONALD

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OBJECTIVE

I am an inquisitive, diligent, and hard-working second-year computer science student at McMaster University. My aspiration is to pursue a career in the tech industry as a developer, and I am currently seeking a **2025 summer co-op placement lasting 4 months**. I am eager to apply my analytical and collaborative skills to a dynamic work environment.

EDUCATION

2023 - 2028 | McMaster University

Bachelor of Applied Sciences - Computer Science Co-op | 3.9 overall GPA
Relevant Classes - Data Structures and Algorithms, Intro to Software Developement, Computer Architecture

EXPERIENCE

McMaster AI Society | Project Lead | Sept 2024 - Mar 2025

- Our team of 7 created a project that allows users to take pictures of paint, pencil crayons, or markers they have and using AI to detect the medium suggests art they can create with the colours and medium they took a photo of.
- The project utilized Python, TensorFlow, PIL for the backend . The frontend uses React.js, and Firebase for a user-friendly website.
- Led weekly meetings to discuss progress on the front and back end, assign tasks, and ensure deadlines were being met.

Google Developer Student Clubs | Software Developer | Sept 2024 - Mar 2025

- The team of 10 worked on an Ocular Disease Identifier that uses AI to detect disease in fundus images.
- The project utilizes Python, TensorFlow, and PIL for the backend and React.js for the frontend.
- Communicated during weekly meetings to discuss progress and completed 2 - 3 week sprints to meet deadlines. GitHub

Tutor.AI | Software Consultant | Mar 2024 - Aug 2024

- Reviewed the backend code of a start up company that created an AI website to match tutors and students within schools.
- The backend Python program included Vectorization, Vector Databases, and Matching Algorithms which I all gave feedback on while also consistently communicating and working with the small team leading the project to achieve optimal code.

McMaster AI Society | Software Developer | Oct 2023 - Mar 2024

- Developed an innovative Python application that allows users to ask questions about uploaded documents.
- Utilized technologies, including Python, LLM, Vectorization, Vector Database, and Similarity Search through API integration.
- Collaborated within a team of 7, contributing to weekly group sessions to discuss design ideas. Check out our project! GitHub

Digital Fire | IT Co-op Placement | Feb 2022 - Jun 2022

- Applied technical skills with precision to successfully set up, configure, and upgrade laptops and desktops, integrating hardware and software components to ensure optimal system performance and long-term reliability.
- Acquired coding proficiency to develop an office inventory system, resulting in improved organization and operational efficiency.

RELEVANT PROJECTS

JustTheInstructions (Chrome Extension AI Model) | May 2024 - July 2024 | GitHub

- Programmed in Python, JS, HTML, and JSON to create an AI Chrome extension that filters unnecessary text from recipe/DIY websites.
- The process included learning about how to train an AI model using public data which was used to filter websites as well as Google's extension system so that we could create a simple-looking product for anyone to use.

ACHIEVEMENTS

- Dec 2023: Google Hackathon Winner (Finished 1st place in McMaster's Google Developer Student Club's Hackathon Equality and Accessibility category). DevPost
- Jun 2023: Academic Excellence (Graduated top 8% of my graduating class with a 98.7% average).
- Nov 2021: Hatch Game Jam Winner (2nd in Canada). Utillized P5.js to make a full game within one month.
- Oct 2020: Hatch Digital Coded Art Competition Winner (1st in Canada). Used Processing Python to create NFTs.

SKILLS AND INTERESTS

- Web Development: React (since 2023), JavaScript within Google Appscript (since 2022), HTML (since 2023), CSS (since 2023)
- Backend/General Development: Python (since 2020), Java (2022), C (2024)
- Functional/Creative Programming: Elm (2023), Processing Python, P5.js (2017-2022). Proficient in Git & Google Docs/Sheets
- Libraries: TensorFlow, PIL, Pandas, NumPy, Matplotlib
- Badminton, Basketball, Table Tennis, Piano, and Investing