IAIN MACDONALD

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EXPERIENCE

Overview: Aspiring AI software developer with experience in computer vision, natural language processing, and applied machine learning projects. Proficient in building and optimizing backend systems in Python, along with frontend development in React.js. Additional experience as a Junior Security Analyst, supporting risk management and security compliance in enterprise environments.

FirstOntario Credit Union | Junior Security Analyst (Co-op) | May 2025 – Apr 2026
- Resolved **500+ security related tickets**, reducing turnaround time for business-as-usual tasks **by 60%**.
- Built and maintained security dashboards and supported projects to uphold the company's ISO certification.
- Integrated REST APIs to develop dashboards tracking key security metrics, improving company-wide visibility and risk management.
- Streamlined the quarterly employee access attestation process, **reducing workload by 80%** and **saving 30+ hours per quarter**.

McMaster AI Society | Technical Vice President | Oct 2023 - Present
- Directed **4 AI project teams** (25+ students) in reinforcement learning, computer vision, and neural networks, preparing work for the Canadian Undergraduate Conference on AI while mentoring team leads and overseeing the club's AI workshop program.

Previously: **Project Lead & Software Developer**
- Led development of an AI art recommendation tool using CNNs trained on **4,000+ images**, achieving **92% accuracy** (GitHub).
- Built a Python based document Q&A tool using LLMs, vector databases, and similarity search APIs. Presented at the Canadian Undergraduate Conference on AI, leading to collaboration with Tutor.AI startup (GitHub).

Google Developer Student Clubs | Software Developer | Sep 2024 - Mar 2025 | GitHub
- Contributed to developing an AI Ocular Disease Identifier for eye scans, designed for potential use in medical diagnostics.
- Collaborated within a team of 10 to implement machine learning and database integration.
- Coordinated through sprints to meet tight deadlines, consistently completing tasks **days ahead of schedule**.

Tutor.AI | Software Consultant | Mar 2024 - Aug 2024
- Reviewed and optimized backend code for a startup's AI tutor student matching system, speeding up development by **2 weeks**.
- Analyzed program flow, algorithms, and vectorization techniques providing recommendations to boost efficiency and matching accuracy.
- Collaborated closely with project leads in weekly meetings, daily check ins, and consistent code sprints.

Digital Fire | IT Co-op Placement | Feb 2022 - Jun 2022
- Configured and upgraded laptops and computers, improving efficiency for hardware and software integration.
- Developed a custom inventory system, cutting storage update times from **~3 minutes to ~45 seconds**, boosting office productivity.

PROJECTS

JustTheInstructions (Chrome Extension AI Model) | May 2024 - July 2024 | GitHub
- Developed an AI-powered Chrome extension that automatically extracts clean, step-by-step instructions from recipe and tutorial pages by removing ads and clutter, delivering a faster user experience and earning 60+ five-star ratings on the Chrome Web Store.
- Trained a custom NLP model on ~1M labeled sentences scraped from 5,000+ websites, achieving 99.6% test accuracy on 100k sentences.

ACHIEVEMENTS

- Participated in UofT Hacks 2025, collaborating with 3 others in a competitive hackathon environment.
- Dec 2023: Google Hackathon Winner DevPost - Achieved **1st place out of 110** participants in the McMaster Google Developer Student Club's Hackathon. In the Accessibility category, we developed a website that transforms text ideas into full slideshow presentations.
- Jun 2023: High School Academic Excellence (Graduated top 8% of my graduating class with a 98.7% average).
- Winner in Hatch Game Jam (2nd/60 people, Nov 2021) and Hatch Digital Coded Art Competition (1st/50 people, Oct 2020).

SKILLS AND INTERESTS

- Backend/General Development: Python (4 years), Java (2 years), C (1 year)
- Web Development: React (1 year), HTML/CSS (1 year), JavaScript within Google Appscript (1 year),
- Functional/Creative Programming: Elm (1 year), Processing Python (4 years), P5.javaScript (4 years)
- Libraries: TensorFlow, Python Imaging Library, Pandas, NumPy, Matplotlib
- Traveled to over 25 countries. Enjoy playing badminton, basketball, table tennis, and piano, as well as investing.

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 Development, Databases, Computer Architecture