Aidan Mitchell

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Education

Western University

- Bachelor of Engineering Science, BESc
- Electrical Engineering and Artificial Systems Engineering Dual Degree

Work Experience

Work Study - University of Western Ontario **November 2025 - Present**

- Designed and implemented Brightspace-based onboarding solutions for graduate engineering programs, improving accessibility and student engagement
- Developed scalable templates for course syllabus standardization across programs
- Conducted needs analysis by benchmarking graduate programs across institutions to identify gaps and propose improvements

Summer Student III - University of Western Ontario **June 2025 - August 2025**

- Led development and migration of the Graduate SmartStart Brightspace platform for Western Engineering
- Presented data-driven reports to the Dean's Office, translating engagement metrics into actionable insights
- Collaborated with stakeholders to refine platform usability and content delivery

IT Support Summer Student - York Region District School Board **May 2024 - September 2024**

- Automated detection of sensitive data exposure using Python, improving analysis efficiency by 50%
- Supported incident response workflows involving secure data handling and compliance

Freelance Website Designer **December 2023 - Present**

- Partnered with clients to gather requirements and deliver customized website solutions
- Translated business needs into technical implementations, increasing site traffic by 30% and engagement by 20%
- Designed user-focused interfaces using HTML, CSS, and modern UI principles

IT Support Summer Student - York Region District School Board **May 2023 – September 2023**

- Utilized technical skills in HTML, and Microsoft SharePoint to enhance user interface and functionality of the intranet platform.
- Demonstrated proficiency in SharePoint Online functionalities, contributing to the successful implementation of the new board calendar.

Project Experience

Facial Recognition Door Lock **March 2026**

- Built a real-time authentication system integrating face recognition and RFID hardware on Raspberry Pi for secure access control
- Developed a FastAPI backend with WebSocket support and a React dashboard for live user management and event monitoring
- Implemented multi-factor verification logic and centralized database architecture, enabling real-time approval/denial and system-wide synchronization

Speech Recognition API **April 2025**

- Developed a voice-controlled browser interaction system using computer vision and speech recognition
- Designed for usability and accessibility, enabling hands-free navigation through real-time command processing

Deep Learning Prediction Model **November 2024**

- In a group of 4 students, created an LSTM learning model to predict future time series data on US economic data.
- Learned and utilized data preprocessing techniques and classification techniques to create a model with 83% accuracy.

Skills and Abilities

Languages: Python, Java, C, MATLAB, VHDL, SQL
Web: HTML, CSS, React.js, Node.js, Figma
Cloud: Azure, Google Cloud Platform, Docker, Kubernetes
Tools: Microsoft Power BI, SharePoint, BrightSpace, Claude Code, Git, GitHub, Microsoft Excel, Microsoft Word
Hardware Skills: Building, repairing computers, PCB board creation, Soldering, Circuit simulation, FPGA
Machine Learning: PyTorch, Tensorflow, Keras, LSTM, GRU, Autoencoders, Transformers, Implementation and Design

English (fluent) and French (fluent).