

Pranav Kukreja

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EDUCATION

McMaster University | B.Eng in Computer Engineering with Co-op

Expected Graduation, May 2028

- o **GPA:** 3.75/4.00 (Deans' Honours List)
- o **Extracurriculars:** McMaster Poker Club (President), Mac Robomaster Computer Vision Team, Sumobot.

EXPERIENCE

Ownright

Toronto, Ontario

Growth Engineering Intern

May 2026 – Aug 2026

- Joined as the engineering team's first-ever intern, owning growth projects across client-facing software.
- Integrated **PostHog** analytics across the full software suite to improve customer tracking.
- Designed and ran A/B experiments across all client-facing software, producing statistically significant results that directly informed product changes.
- Built email lists and drip campaigns in **Customer.io** with custom business logic.
- Developed AI Reddit automations to improve Answer Engine Optimization (**AEO**), and increase brand visibility.

General Dynamics Mission-Systems

Ottawa, Ontario

Systems Software Engineering Intern

May 2025 – Dec 2025

- Developed PowerShell scripts used by system admins for troubleshooting and diagnostics, on the LC4ISR product suite.
- Built an internal RAG-Chain AI tool that assisted onboarding engineers with documentation-specific questions.
- Configured Cisco routers and switches, used in both the Department of Defence and General Dynamics networks.
- Completed internal course on SAFe principles and applied them within an Agile development environment.

Sterilwize (Pre-Seed Startup)

Toronto, Ontario

Computer Engineering Intern

May 2024 – May 2025

- Worked on a data acquisition system using **ESP32** based microprocessors and custom PCB accessories that automated data logging for sterilization equipment.
- Developed cloud-integrated service with API functionality for remote access on **AWS cloud** platform.
- Created and updated the custom documentation for clients on the bespoke IoT devices.

PROJECTS

Enterprise Retrieval-Augmented Generation (RAG) System

AI Internship Project

- Created an employee on-boarding system using **Llama.cpp** with the Mistral 7B model for lab specific questions.
- Used all-mpnet-base-v2 embeddings with **FAISS** vector search to enable information retrieval over lab documentation.
- Secured budget allocation for further development and expansion of the system across the office lab environment.

Harmonize - Deployed Web App

Collaborative Media Streaming

- Built and deployed a web application enabling synchronized media playback across YouTube, SoundCloud, and Spotify, with ReactJS and stylized using PureCSS.
- Designed a backend hosted on **MongoDB Atlas**, leveraging MongoDB Query Language (MQL) for efficient data storage and retrieval of user sessions, room configurations, and media queues.

Diabetic Retinopathy Medical Image Classification Model

Medical AI

- Trained an image classification model using **Tensorflow** on Optical Coherence Tomography (OCT) scans of patients diagnosed with diabetic retinopathy.
- Connected the model to a Flask web-app that allowed users to submit new retinal scans and get basic diagnoses supported by confidence scores. Achieved average accuracy of **84%**.

SKILLS

Technical Skills: Python, C++, Typescript, Firebase (Firestore), MongoDB, VHDL, PCB Design, AWS

Frameworks/Libraries: TensorFlow, PyTorch, OpenCV, YOLO, Mediapipe, NumPy, Matplotlib, Express, ReactJS, Angular