

AKSHAY MOHAN GUPTA

☎ 437-235-8045 ✉ akshaymgupta2008@gmail.com 🔗 [linkedin.com/in/akshay-m-gupta](https://www.linkedin.com/in/akshay-m-gupta) 🌐 <https://github.com/AkshayG99>
📖 medium.com/@akshaymgupta 🌐 [Personal Website](#)

Education

Central Peel SS

Advanced Placement (AP)

Brampton, Canada

- Average: **99.88%**
- **1 of 90** across Peel enrolled in the **Advanced Placement Program**

Experience

Python & AI Instructor

Jun 2024 – Sep 2024

Peel District School Board

Peel, Canada

- Mentored over 30 students in the basics of Python to AI development using **TensorFlow & PyTorch**
- Created detailed lesson plans for each day to ensure student success
- Mentored by computer science teacher before taking on this role

Organizations

Jun 2023 – Current

Various

Brampton, Canada

- **City Of Brampton - Lifeguard:** Lifeguard and Aquatics Instructor in charge of over **100+ people**.
- **INTERACT - President:** Social justice club raising funds and awareness for critical issues. I am in charge of 80+ students.
- **SPARK - Corporate Relations Chair:** Non-Profit Organization dedicated to teaching youth about STEM via hackathons, networking events, and workshops. On my team, I lead 3 other members in fostering relationships with brands.
- **DECA - Marketing Cluster Chair:** International Business Organization with events around the world. I am in charge of teaching 60+ students advanced **business & leadership** skills preparing them for an event in Orlando, Florida.
- **ROTARY CLUB - 1 of 25 across Canada** invited to British Columbia for an all-expenses paid summit on the Indigenous Peoples Of Canada. 1 on 1 conversation with the Chancellor of the University Of British Columbia, BC Lieutenant Governor, Chancellor Of The University of the Fraser Valley, President Of Honoring Indigenous Peoples, Woman of the Year winning author. Invited to mentor next year's conference in Nova Scotia. Attended conferences and exclusive dinners to share my experiences with prominent change makers.

Projects

Rigor: Fitness Companion | *Python, JavaScript, Django, Google Gemini, Firebase*

Won \$500 for Innovative Idea

- **Full stack application** that scans food and calculates the macronutrient and calorie content
- Employed prompt engineering and fine-tuning skills to tune the general AI for our specific use case
- "For you" feature would deliver a custom workout plan based on the user's needs, desires, and goals

AutoSurgeon | *Python, OpenCV, MediaPipe, Pyserial, Arduino*

Hack the Heart: Toronto Biomedical Hackathon

- Mimics the user's arm movements, allowing for **virtual surgeries** (like Coronary Angioplasty) to be performed
- Why: Severe operations require specialized doctors who, often in remote regions, aren't immediately available to come in. AutoSurgeon allows these operations to be performed virtually, so patients can get care immediately
- How: Joints are detected and through **linear algebra**, and the angle between limbs on one's arm is determined. This is then passed to our **physical robotic arm** (made with stepper motors, gears, transistors), which utilizes our **algorithm** to convert the angle measurements into actions that will mimic the user's movement
- Currently implementing **error detection ML models**, to ensure surgeries go properly and use the best approach

Quantitative Analysis Bot | *Python, TensorFlow, Numpy, Pandas, Matplotlib, 18 others*

Own Funds Invested

- Uses Reinforcement learning to predict stock returns via TensorFlow
- Averages **120% return on investment**

Technical Skills

Courses: Harvard CS50/Python/CS50 Artificial Intelligence, Scrimba Javascript, Scrimba React, LinkedIn Linux & Bash, Postman API Creation

Coding: Python (OOP, OpenCV, AI Integration), TensorFlow, PyTorch, React, JavaScript (API's, Databases), Git, MERN STACK, C++

Hackathons: Google Developer SC, Hack the Heart, UofT Hacks, Make UofT, Delta Hacks

Fun Facts about Me: US and CAN Citizen, plays Hockey, posts AI Articles on medium.com/@akshaymgupta