Akshay Mohan Gupta

↓ 437-235-8045
 ★ akshaymgupta2008@gmail.com in linkedin.com/in/akshay-m-gupta ♠ 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 60 students in React, MERN Stack, Python & AI development using TensorFlow & PyTorch
- Mentored by computer science teacher before taking on this role

HACK MIT Sep 2024

Massachusetts Institute of Technology (MIT)

Cambridge, Massachusetts

- ONLY HIGH SCHOOL STUDENT TO ATTEND HACK MIT
- MOST PRESTIGIOUS HACKATHON IN THE WORLD
- Spoke with Chegg CEO, Knowt CEO, MIT D-LAB Director, Aurora CEO, etc

Organizations Jun 2023 - Current

Various

Brampton. Canada

- INTERACT: President: Social justice club raising funds and awareness for critical issues. I am in charge of 80+
- 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. 1 on 1 conversation with the Chancellor of the University Of British Columbia, BC Lieutenant Governor, 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 tone 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/CS50P/CS50AI, Udemy Tensorflow , Scrimba Javascript, Scrimba React, MERN STACK Coding: Python (TensorFlow, OOP, ML), JavaScript (API's, Databases), React, MERN STACK, HTML/CSS, Git

Competitions: Waterloo Math Contests, DECA Internationals (ICDC) Competitor in California Fun Facts: Loves Sports (Hockey, Volleyball, Basketball, etc), Posts AI Articles on Medium