

Shrish Choudhary

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Education

Massachusetts Institute of Technology, Cambridge, MA **Expected Graduation, May 2027**

- GPA: **4.8/5.0**
- BS in Computer Science and Artificial Intelligence, Minor in Business
- **Related Coursework:** Discrete Math, Intro to Algorithms, Fundamentals of Programming, Design and Analysis of Algorithms, Intro to Machine Learning, Corporate Financial Accounting

Experience

Theoretical Physics Lab, Cambridge, MA **June 2024-Present**

Undergraduate Researcher

- Utilized computer vision, triangulation using stereo vision, and mechanics to program a robotic arm to autonomously arrange optical layouts with a precision of 0.1 mm ([Demo](#)).
- Worked with YOLO and Pose CNN Deep Learning Networks to test methods of improved precision

MIT Edgerton Center, Cambridge, MA **November 2023-May 2024**

Undergraduate Researcher

- Collaborated with Harvard Medical School to tune and test an Android app that analyzes surgical wounds and determines infections locally by leveraging PyMed libraries

Projects

Robotics **2019-2023**

- Mask Enforcer Turret
 - Custom-designed and 3-D printed projectile firing mechanism that incorporated a custom trained mask detection model to detect and throw projectiles at maskless people.
- Tennis Roomba
 - Designed and machined a robot that utilized PID controls and odometry for spline paths along with a trained model using TensorFlow to detect and collect balls on a tennis court.

Tennis Shot Detection Model **Winter 2023**

- Created a multiclass detection model using PyTorch and a custom collected dataset. Leveraged transfer learning to create a model to analyze professionals and find patterns in shot-selection.

Performance Tracker **2023-Present**

- Created and deployed a Django app with an AWS-RDS PostgreSQL database and a python web scraper to record and analyze discrepancies in different tennis ranking systems.

Awards & Accomplishments

- **AWS Cloud Practitioner Certificate** **February 2024**
- **MIT Men's Varsity Tennis** **August 2023-Present**
- **Eagle Scout of America** **May 2020**

Skills

Languages: Python, Java, C++, HTML, JS, CSS, REACT JS, SQL

Frameworks/Tools: PyTorch, Django, TensorFlow, Vuforia, OpenCV, PostgreSQL, AWS, Git, Android