Sanskar Gupta

Machine Learning | Computer Vision | Python Developer



sanskargupta.dev | GitHub https://github.com/sanskargupta1808

Education

Vellore Institute of Technology, Chennai B.Tech in Computer Science and Engineering Specialization: Artificial Intelligence and Robotics 2021 – 2025

Technical Skills

- Programming Languages: Python, Java, C++, JavaScript, Swift
- AI/ML/DL Frameworks: TensorFlow, Keras, PyTorch, scikit-learn, XGBoost
- Computer Vision: OpenCV, MediaPipe, YOLO, SSD
- Data Science: Pandas, NumPy, Matplotlib, Seaborn
- Web Development: HTML, CSS, JS
- Application Development: Flutter (Dart), Node.js, Express.js, Firebase, Django
- Cloud/Automation: AWS, Google Cloud, Python (Scripting, Process Automation)
- Tools: Git, Docker, Postman, Linux, MatLab, Arudino & Raspberry Pi with multiple sensors
- DevOps Tools: Jenkins, Maven, Liquibase, Artifactory, Git, Shell Scripting

Projects

- **GestureBridge:** Built a multimodal system allowing users to control systems via gestures, voice, and gaze with real-time MediaPipe hand-tracking and PyQt interface.
- **Fundus Eye Disease Classifier:** Developed a CNN-based model to classify 28 types of retinal diseases from fundus images, achieving high diagnostic accuracy.
- Body Fat Estimation System: Created an AI model estimating body fat percentage from full-body images using pose detection and predictive modeling.
- **Emotion Analyzing System:** Implemented an ML-driven emotion classifier using LSTM and SVM models to predict emotional states from social media and journal entries.
- **Self-Balancing Robot:** Designed and controlled a two-wheel robot using PID control logic for real-time balance and obstacle avoidance.
- Room and Space Mapping Robot: Built a SONAR-based autonomous robot to map spaces
 using rotating ultrasonic sensors, replicating LiDAR functionality affordably.
- Database Automation: Automated database automation using Jenkins and Mavins along with Liquibase, can be used by large entreprise during updates.
- Others: For other projects, please click here.

Achievements

- Winner of GDSC Hackathon
- Finalist: Android Club Hackathon (Android App Development)
- Finalist: Formulathon (Autonomous Formula Car Solutions)
- Certifications : Cleared AWS Certified Cloud Practitioner (CP) and AWS Certified Solutions Architect Associate (SAA), Aritifical Intelligence (IBM)
- Other Certifications (Udemy): Python Programming, Machine Learning, DSA, Flutter, Artifical Intelligence, Computer Vision