Tejeswar Pokuri

Passionate Engineer leveraging Machine Learning and Deep Learning techniques to solve real-world challenges

tejeswarpokuri3@gmail.com | 9505437075 | Linkedin | Github

EDUCATION

Manipal Institute of Technology, Manipal | *B.Tech Computer Science* **2026**
- CGPA: 9.45

Sri Chaitanya College, Vijayawada | *BIEAP(Class XII)* **2022**
- Percentage: 93.5%

EXPERIENCE

RUGVED Systems **May 2023 – Present**
AI Member
- Worked on human anomaly detection in outdoor regions, auto navigation system for visually impaired.
- Led a team of 4 at OpenCV AI Competition 2023.
- Mentored and tutored 10 juniors in the basics of machine learning, exploratory data analysis, OpenCV, and Python.
- Conducted research on applications of AI in the aerospace industry and optimization algorithms.
- Currently working Spacecraft Pose Estimation and Dehazing images

MIT,Manipal **Oct 2023 – Present**
Research Intern
- Working under Dr Andrew and Dr Venkatesh regarding in Epilepsy Detection using Deep Learning.

CERTIFICATION & AWARDS

Top 7 at OpenCV AI Competition 2023 **Dec 2023**
- Lead a team of 4 and finished in top 7 in The International OpenCV AI Competition by creating an auto-navigation system called Guiding Gaze
- Recognized with a $1000 prize for project excellence and represented the sole Indian team in the Top 7, showcasing global competitiveness.

Winner at Investigar Competition **Oct 2023**
- Presented & secured the first place in Investigar competition for the paper GESSURE based on cutting-edge gesture recognition technology

PROJECTS

Guiding Gaze | *Project Page* **2023**
- Developed Navigation System for the visually impaired with Obstacle Detection, Depth Estimation, Scene Recognition, Barrier Detection, Facial Recognition, and Navigation modules.
- Custom YOLOv7 (mAP 0.76) for household, road, and stairs. MIDAS for depth, VGGFace for facial recognition, EffNetB2 for scene recognition (12 classes, F1 0.91), used MapQuest API for directions. Achieved realtime navigation using Nvidia GeForce GTX 1650 GPU.

Project Garuda **2023**
- Worked on Project Garuda, a smart surveillance system for human anomaly detection in outdoor regions
- Used Mediapipe to detect anomalies (Running, Crawling, Jumping), integrated with website backend.

SKILLS

Programming Languages: Python , C , C++ ,JAVA, HTML, CSS

Libraries: TensorFlow, PyTorch, OpenCV, NumPy, Pandas, Matplotlib, Scikit-learn