

Dheeraj N

8088829439 | ndheeraj2003@gmail.com | github.com/dheeraj

EDUCATION

Global Academy of Technology <i>Bachelor of Technology in Artificial Intelligence and Machine Learning</i>	2021 – Present CGPA: 8.22
Vidya Mandir Ind PU College <i>Pre-University Course, Karnataka PUC - Computers</i>	2019 – 2021 CGPA: 7.5

EXPERIENCE

Machine Learning Intern <i>Hindustan Aeronautics Limited</i>	Oct 2024 – Nov 2024
<ul style="list-style-type: none">Engineered an AI-driven gaze detection system to enhance cockpit safety by enabling hands-free control of avionics.Developed and integrated blink detection algorithms for seamless pilot interaction with on-screen cockpit elements.Collaborated with industry experts to refine the system for real-world deployment in aviation.	
Web Development Intern <i>DigiMogo</i>	Jan 2025 – Present
<ul style="list-style-type: none">Designed and developed two scalable, responsive web platforms using React.js, JavaScript, HTML, and CSS.Enhanced UI/UX with Bulma for a modern, mobile-first experience, increasing user engagement.Led the end-to-end deployment of Gyanti.org and a teacher portal, improving navigation and accessibility.	

PROJECTS

EchoSight <i>YOLO, OpenCV, Face Recognition, TTS, Arduino IDE, ESP32, NodeMCU</i>	Present
<ul style="list-style-type: none">Developed an AI-powered assistive device that provides real-time audio descriptions for visually impaired users.Integrated YOLO for object detection, facial recognition for user identification, and text-to-speech (TTS) for verbal feedback.Collaborated with hardware teams to build a system using ESP32, NodeMCU, and ultrasonic sensors for enhanced environment perception.	
ASL Hand Sign Recognition <i>Python, OpenCV, MediaPipe, TensorFlow, CNN</i>	2024
<ul style="list-style-type: none">Developed a CNN-based deep learning model for real-time American Sign Language (ASL) gesture recognition.Built and labeled a custom dataset with 30+ hand gestures, improving model robustness and accuracy.Integrated OpenCV and MediaPipe for efficient hand tracking and gesture recognition, enhancing real-time performance.	
Eye Tracking Assisted Control System <i>OpenCV, MediaPipe, PyAutoGUI</i>	2024
<ul style="list-style-type: none">Developed an AI-powered hands-free system using eye-tracking and blink detection.Implemented facial landmark detection for accurate gaze monitoring and user intent recognition.Designed a real-time interface to track eye movements and control the cursor.	
Movie Recommender System <i>Python, Streamlit, Cosine Similarity, Pandas</i>	2023
<ul style="list-style-type: none">Built a content-based movie recommender using Cosine Similarity for feature matching.Developed a Streamlit-based web app for interactive movie search and recommendations.Preprocessed a 5,000+ record dataset to enhance recommendation quality and speed.	

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, C, SQL
Machine Learning & AI: Deep Learning, Computer Vision, NLP, Reinforcement Learning, CNNs, RNNs, LSTMs, Transformer Models
Frameworks & Libraries: TensorFlow, PyTorch, Keras, OpenCV, Scikit-Learn, LangChain
Web Development: React.js, Next.js, Node.js, Flask, Bulma, Tailwind CSS
Developer Tools: Git, VS Code, PyCharm, Jupyter Notebook, Arduino IDE