Durgesh Singh Gour

+91-7877710988 | dsgaur1125@gmail.com | Github | linkedin

EDUCATION

Indian Institute of Information Technology , Una   HP, India
Bachelor of Engineering in Information Technology   2024 – 2028

SKILLS

Technical: Machine Learning, NLP , Deep learning , CI/CD.
Libraries: NumPy, Pandas, Matplotlib, Seaborn, OpenCV (Basic), Scikit-Learn.
Frameworks: Langchain ,Flask, Streamlit ,TensorFlow, Keras, PyTorch(basic).
Tools: AWS (Basic) , Git, GitHub, Docker , Jupyter Notebook, HuggingFace.
Languages: Python,C,C++.

EXPERIENCE

IIITDM Jabalpur   MP *, India*
Research Intern   Jun 2025 – Aug 2025

- Authored a research paper presenting AgriVision, a platform for real-time plant and fruit monitoring using YOLOv8, YOLOv11, and RT-DETR models, integrating advanced computer vision with practical agricultural monitoring.
- Leveraged Roboflow to execute sophisticated data augmentation strategies, boosting the computer vision model's generalizability across varied environmental conditions reduced model failure rate by 15%.
- developing scalable and easy-to-use digital tools to close the gap between AI research and its use in precision agriculture.

PROJECTS

AgriSpect | AI Crop Monitoring Platform   Jun 2025 – July 2025

- Developed a web-based application for automated detection and counting of plants and fruits in agricultural images and videos using state-of-the-art object detection models (YOLOv8, YOLOv11, RT-DETR).
- Streamlined data preparation using Roboflow, annotating 5,000+ images and applying advanced data augmentation techniques, increasing model generalizability by 30% and improving detection rates in diverse field conditions.
- Deployed an intuitive Streamlit interface for detection models, processing diverse inputs (images, videos, webcam) and delivering predictions in under 0.5 seconds .
- Implemented and benchmarked deep learning models for real-time object detection, achieving fruit counting precision above 95% on test datasets.

ASL Sign Language Recognition App | **Personal Project**   May 2025 – June 2025

- Engineered a deep learning-based Streamlit web application with TensorFlow and Keras, achieving 98% accuracy in classifying ASL alphabets and earning recognition as the team's most reliable model.

- Leveraged Mediapipe for precise hand detection in American Sign Language (ASL) recognition, enhancing prediction reliability by 40% and improving real-time inference speeds for alphabets by 15 milliseconds per frame.

- Core Tools & Frameworks: Python, TensorFlow, Keras, Streamlit, OpenCV, Mediapipe, Hugging Face .

CERTIFICATIONS

- IIITDM Jabalpur Summer School on Deep Learning (May 2025 – June 2025)
    Completed intensive training covering CNNs, RNNs, Transformers, GANs, LLMs, and hands-on projects using TensorFlow and PyTorch , Worked on a capstone project: ASL Alphabet Recognition using Deep Learning.
- Machine Learning Specialization(DeepLearning.AI & Stanford Online (Coursera))
- Complete Machine Learning & Data Science Bootcamp(Udemy (Instructor: Krish Naik))
- Complete Generative AI Course With Langchain and Huggingface(Udemy (Instructor: Krish Naik))