Malla Sujith Vaishnav

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Summary

Motivated and curious learner with practical experience in machine learning and deep learning using Python and TensorFlow. Strong foundation in building ML models and applying them to real-world problems. Eager to contribute to innovative projects, collaborate with experienced teams, and grow through hands-on experience in a fast-paced environment

Education

Indian Institute of Information Technology, Sri City 2023 - 2027
B.Tech in Artificial Intelligence and Data science

Resonance Jr College, Vijayawada 2021 - 2023
Intermediate in MPC

Technical Skills

Programming Languages	Python (NumPy, Pandas, scikit-learn, TensorFlow), C, HTML
Platforms	Microsoft Windows, Ubuntu
Databases	MySQL
Machine Learning	Supervised and Unsupervised Learning, Neural Networks (ANN, CNN, RNN), Object Detection (YOLO), and familiar basic Reinforcement Learning

Experience

Core Member, Epoch IIITS 2024 - Present
Computer Vision Domain

Projects

Plant Leaf Disease Detection Repository

- Developed a CNN-based classifier using MobileNetV2 to detect plant leaf diseases from RGB images.
- Applied data augmentation (rotation, zoom, flip) via `ImageDataGenerator` to enhance model generalization.
- Fine-tuned MobileNetV2 with transfer learning; trained top layers using Adam optimizer and cross-entropy loss.
- Optimized performance through validation and hyperparameter tuning; evaluated with precision, recall, and F1-score.

Bird Voice Recognizer Repository

- Built a machine learning pipeline to classify bird species from audio recordings using the BirdCLEF 2022 dataset.
- Preprocessed and extracted features such as MFCCs from .ogg audio files using Librosa, and applied SMOTE to handle severe class imbalance across 150+ bird species.
- Trained and evaluated a Decision Tree Classifier, achieving efficient and interpretable bird species prediction based on the extracted acoustic features.