

Day 15: Python Training - Face Recognition Project (Model Training)

Objective:

Focused on building the training logic for the facial recognition system using LBPH algorithm from OpenCV.

Key Tasks Completed:

- Traversed the saved dataset folder and read images for each individual.
- Preprocessed images using grayscale conversion, resizing, and histogram equalization.
- Used OpenCV's `cv2.face.LBPHFaceRecognizer_create()` with tuned parameters for model training.
- Generated label mappings and stored them in a separate `labels.txt` file.
- Saved the trained model as `trainer.yml` for reuse in the recognition phase.
- Added error handling for missing data scenarios.

Outcome:

Model training logic was successfully completed and saved, allowing further steps like real-time recognition.