Face Recognition

Data:

This pins-face-recognition dataset contains 10,770 images for 100 persons. All images took from 'Pinterest' and aligned with dlib library

In this problem, we use a pre-trained model trained on Face recognition to recognize similar faces.

Here, we are particularly interested in recognizing whether two given faces are of the same person or not.

Data reference: https://www.kaggle.com/frules11/pins-face-recognition/downloads/pins-face-recognition.zip/1 (Original)

https://archive.org/details/pins-face-recognition (Reference)

Key asks:

Here, we are particularly interested in recognizing whether two given faces are of the sameperson or not. Below are the steps involved in the project.

- Load the dataset and create the metadata.
- Check some samples of metadata.
- Load the pre-trained model and weights.
- Generate Embedding vectors for each face in the dataset.
- Build distance metrics for identifying the distance between two given images.
- Use PCA for dimensionality reduction.
- Build SVM classifier to map each image to its right person.
- Predict using the SVM model.