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Face\_profiling project

This Python code performs **face and eye detection** using Hear cascades in OpenCV and attempts to predict a person's personality traits based on facial features. Here's a brief description of the code:

1. **Feature Detection**:
   * The code uses pre-trained Hear cascade classifiers (haarcascade\_frontalface\_default.xml and haarcascade\_eye.xml) to detect faces and eyes in an image.
   * The image is converted to grayscale for processing.
2. **Face Detection**:
   * Faces are detected using detectMultiScale, and rectangles are drawn around detected faces.
   * The size of each detected face is calculated.
3. **Eye Detection**:
   * Within each detected face, eyes are detected, and rectangles are drawn around them.
   * The size of each eye and the distance between eyes (if at least two eyes are detected) are calculated.
4. **Personality Prediction**:
   * A simple heuristic-based function predict personality is used to predict personality traits:
     + If the face size is large and eye sizes are above a threshold, the person is labeled as "Extrovert".
     + If the face size is large but eye sizes are smaller, the person is labeled as "Confident".
     + If the distance between eyes is small, the person is labeled as "Introvert".
     + Otherwise, the person is labeled as "Balanced".
5. **Display**:
   * The image with detected faces, eyes, and predicted personality labels is displayed using OpenCV's imshow.
6. **Output**:
   * The script shows the processed image with bounding boxes around faces and eyes, along with the predicted personality traits.