

## Face Recognition using Principal Component Analysis

**Dataset:** The dataset used is “The ORL Database of Faces” of AT&T Laboratories Cambridge.

**Training Set:** There are six different images of each of 10 distinct subjects. For some subjects, the images were taken at different times, varying the lighting, facial expressions (open/closed eyes, smiling / not smiling) and facial details (glasses / no glasses). All the images were taken against a dark homogeneous background with the subjects in an upright, frontal position (with tolerance for some side movement).

**Test Set:** Four different images of each of 10 distinct known subjects and four different images of unknown subjects used.

Steps for training and testing can be found here [Face Recognition using PCA](#)

### **Result:**

Total 60 images are used for training and 44 images are used for testing of which 4 images are unknown.

38 of 44 images are correctly predicted. So the accuracy of this model is 86.36 %