CS 764: Lab 04

The amount of masking depends upon the image we are choosing to match. We are given a set of image database having images of various people. Now we are going to identify our face(intruder) among the database. But the intruder here is masked and the masking is varied with the radius of the hole.

So here we started experimenting with 5cm diameter (maskMiddle1.jpg) and observed a very less retrieval score(0.0023), since the face is not visible. Later we increased the hole diameter to 10cm (maskMiddle2.jpg) and observed the retrieval score to increase to 0.0024. Then we increased the diameter to 12cm (maskMiddle3.jpg) and observed the retrieval score to be 0.0065 which is clearly large. Since we set a threshold of retrieval score 0.005, the maskMiddle3.jpg is an intruder. The maskMiddle4.jpg of diameter 15cm gave a retrieval score of 0.0078. So a minimum amount of masking is required in order to obtain a good retrieval score and in our case we set a threshold of 0.005, to minimise the false positives.