

HCI/ComS 575X

HW4: Face Detection and Face Recognition

Out: Mar 22, 2006

Due: Apr 5, 2006

Choose 2 of the following 3.

If you choose 1&2 you can try to do the extra credit problem as well.

PART 1:

- (a) Use openCV's face detection demo plus some additional code that you will have to write to count how many people pass in front of the camera in the sidewalk video1. The video is posted on the Wiki.
- (b) (OPTIONAL) Do the same for video2.

PART 2:

Implement eigenfaces in openCV. You can use the same face images that were used for the matlab demo during the lecture (posted on the class web site).

PART 3:

Incorporate some aspect of face detection and/or face recognition in your final project. In other words, if you choose this option you must submit only part 1 or part 2 for HW4. Part 3 will become part of your final project submission.

EXTRA CREDIT:

- (a) Use your eigenfaces code in combination with the face detection code from part 1 to locate three specific individuals in the crowd. The three images are posted on the Wiki.
- (b) Do the same for video2.