Face Recognition using Face Images obtained from the Internet

Computer Vision (CS6350)
TPA-2

1. Problem Statement

In the standard setup of Face Recognition (FR), a model (deep or shallow) [1, 2, 3, 4] is learned using training and validation data. The performance of the model is then assessed using the test data. In this assignment, the students will be expected to train a model using a few labeled data coupled with any standard dataset (either fine-tune model with few labeled data after training with any standard dataset OR augment any standard dataset with the labeled data and train the model). During the test time, given a web page with few face images within it, the designed software is expected to parse the web page to extract all the images from the page for recognition.

2. Input

A webpage having a structure similar to

   i.   http://www.cse.iitm.ac.in/~vplab/ (On the menu on LHS, go to People -> Current people)

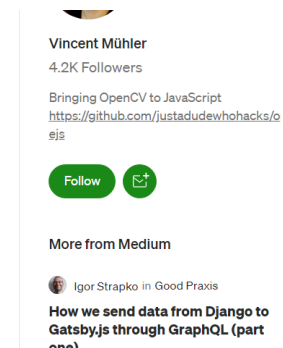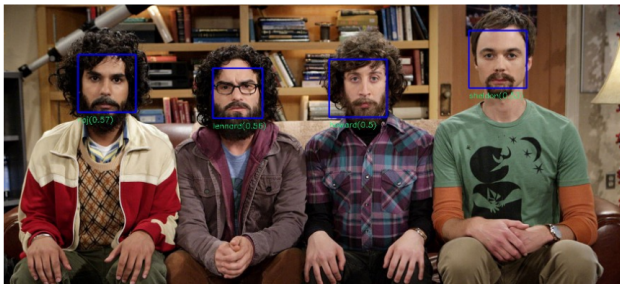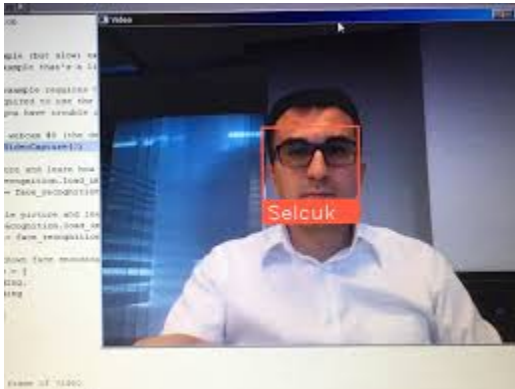 ii.   https://www.cse.iitm.ac.in/listpeople.php?arg=MSQw.

3. Output
- A 3 column table containing the image extracted from the webpage and the corresponding name and confidence score respectively.
- Should work online, given any website link.

4. Datasets
VGG face [3], PIE, LFW datasets.

5. Face Recognition on web pages examples

6. References

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6. Parkhi et al. \Deep face recognition", BMVC 2015.

7. Simonyan et al., \Very Deep Convolutional Networks for Large-Scale Image
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