# **CS385 Computer Vision**

# Lab-14: Face Detector Pipeline

# **100 points**

**Task :**

There are various algorithms for face detection, implement a traditional method using Haar cascade feature (and HOG) that analyze the input data and output the coordinates or bounding boxes of detected faces. Convert the given image to gray scale and rescale it to different sizes. For each scale, use a face/non-face classifier to scan the images in a sliding window manner. Once faces are detected, post-processing steps may be applied to refine the results. This could involve filtering out false positives, refining the bounding boxes, or applying additional checks to improve accuracy. . Use non-maximum suppression (NMS) to find the potential bounding boxes. The detected faces ( bounding boxes) are overlaid on the original image frame as output

Dataset:

<https://cciitpatna-my.sharepoint.com/:u:/g/personal/divya_1921cs21_iitp_ac_in/EWKl12LVPMFJg5a2MFRZ3FMBCbrabzDSwG1tIUehW_9fmQ>

**Submission:**

Demonstrate your work . Also submit as a single file the code and results.

<https://u.pcloud.com/#page=puplink&code=mEikZyzcveJhLTIFxE9Y1zDLCw8U6L8rX>