

COMPUTER VISION – LAB (AI303L)

Class: BS-AI-VI

Semester: Spring 2024

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Assignment # 03

Lab # 05

HOG Feature Extraction in Python

Guidelines for Attempting the Assignment:

- The lab tasks should be done on individual basis.
- Lab tasks solution should consist of workable codes and a detailed report containing a discussion on different tasks and their solutions, along with input and output images.
- The report should be prepared as an electronic document, following a consistent format. Make use of headings and subheadings where necessary.
- Submit your lab tasks (code + report) within the due time, as late submissions will not be encouraged and will result in the deduction of your marks.
- There will be a viva voce regarding the lab tasks, and the obtained marks will also be based on the viva performance.

[Task # 01]: Face Recognition

Your task for this lab is to try using HOG features on a simple [computer vision](#) problem e.g.

Face Recognition on dataset compiled in the lab and see if the model performance improves.

Do mention the feature size. Use SVM classifier for the classification.