

Coded using Matlab 2018b

Setup

Extract dataset in the same folder as the training and testing files. (dataset folder will have two sub-folders trainset and testset, each of this folder has two subfolders faces and non-faces)

Training and testing adaboost classifiers

Training : Run **project_main_train.m** file. While running the file it will ask for number of rounds as input from user. Enter desired number of rounds. Let it run. This will save all the data into respective files. (For training classifiers using false negative as a selection criterion use project_main_train_Q3.m file)

Testing: Run **project_main_test.m** file this will generate a plot of accuracy, false positive rate and false negative rate.(For testing classifiers using false negative as a selection criterion use project_main_test_Q3.m file)

Utility functions: **Plot_haar_best_classifier_all.m** - plots top features for each rounds of adaboost onto a face image.

excel_writer.m - writes necessary data to an excel file

data_display.m - display necessary plots