

יהלום חסיד-208515577

1st Notebook:

I started with adaboost using decision tree and got 73.5% after that I used bagging and the accuracy went up to 74% however after using the cross validation I got roughly 72% with all the modules including the ones I used last semester.

2st Notebook:

I started by checking the data distribution after that I used all the data on xg boost and got 90% accuracy then I normalized the data and used PCA for dimensionality reduction and visualized the data on a 2d plain then I used different modules to see which one will have the best score the best one was Xgboost 88.68%

3st Notebook:

I upload all the data pictures and resizing them to 60x60 after that I transformed each picture into a row in my data frame then I used pca to lower dimensionality, I splatted the data set to 80% train and 20% test then I trained different modules for the classification and had the highest accuracy on voting classifier with 65%

4st Notebook:

This notebook was a bit more challenging I created two function one for the alone class and one for together.

In the alone function I deleted the rows with right hand so I could merge it with the right hand dataset after deleting the first 7 seconds a the recording I merged the two sets with concat so each row will have data on right and left hand after each dataset.

After creating the two datasets I matched the columns to match with the names and the amount and merged them together to use for the training data(same thing for the test)

I used PCA and matplotlib to show the distribution on 2D and 3D plain.

I got rid of every 4 row with loc function then trained the different modules and got the highest accuracy on adaboost with decision tree 74.5% accuracy .