Final test

June 12, 2023

1 Task

For data from final_test_classification_data.csv:

- create holdout datasets train (60%), test (20%) and validation (20%) dataset
- perform standarization of the data
- perform reduction of dimensionality of the data using PCA or LDA
- perform classification train different machine learning classification models: Nearest Neighbors classifier, Linear and RBF SVM, AdaBoost classifier, Naive Bayes classifier, QDA classifier)
- choose the best model
- evaluate model on validation data
- create a bar plot with comparison of different classifiers according to their best accuracy on test and validation dataset

2 Task

- create holdout datasets of data final_test_regression_data.csv.
- create two regressors and plot lines of prediction given by the trained regressor
- plot points of train data.
- plot predictions of the regressor in side and outside range of values of the train, test or validation dataset.