

REPORT

Lab10. Patients Physical Activities Prediction using Boosting

In this lab we have learned to recognize patient's physical activities such as laying, sitting or walking using Gradient Boosting, AdaBoost and VotingClassifiers.

After checking the properties of dataset, we have seen that we have huge set of data so will split data by dependent values such as laying sitting or walking.

So after creating a small dataset with the shape of (1500,563) rows and columns and creating a gradient boosting classifier with 30% of testing size the perform fit and predict also print accuracy and classification report then find best no. of decision trees and learning rate using GridSearch and Cross Validation.

Then build AdaBoost classifier model with GridSearchCV perform fit and predict then print accuracy score then do the same for LogisticRegressionCV model and VotingClassifier then finally interpret results and parameter values.

Make changes with the parameter to get better prediction.