

Relevant Packages Installation

Package Name	Version
imbalanced-learn	0.5.0
imblearn	0.0
matplotlib	2.2.2
numpy	1.16.4
pandas	0.23.0
pip	19.2.2
py	1.5.3
scikit-learn	0.21.3
xgboost	0.90
category-encoders	1.3.0
mlxtend	0.13.0

Instructions to Run Code File:

- 1) As the submitted file is a IPython Notebook every cell need to be run sequentially.
- 2) In the Random Forest model rfc the grid search best parameters are given again running the grid search for random forest may take more time so can skip that cell.
- 3) Hyper Parameter Tuned RF model - rfc - Best Score - rfc.predict()
- 4) Ensemble Vote Classifier - ensemble_clf - ensemble_clf.predict()
- 5) Xg Boost - xgb_boost1 - xgb_boost1.predict() - hyper parameter tuned
- 6) Grad Boost - grad_boost1 - grad_boost1.predict() - hyper parameter tuned
- 7) Stacking Classifier - sclf1 - sclf1.predict()
- 8) Reursive feature elimination x_train changed to x_rfe if any model run on x_rfe fintest and x_test needed to be changed according to the features eliminated.