

DataSet used: creditcard.csv from Kaggle

Imported Libraries:

- Pandas
- Matplotlib
 - matplotlib.pyplot
- Seaborn
- Scikit-learn
 - sklearn.preprocessing
 - sklearn.linear_model
 - sklearn.model_selection
 - sklearn.metrics
 - sklearn.tree
 - sklearn.ensemble
- Joblib

Data pre-processing done by:

- Data Reduction,
- Data Transformation (scaling)

Techniques for handling unbalanced dataset:

- Undersampling
- Oversampling using SMOTE(Sythetic Minority Oversampling Technique)

Models used:

- Logistic Regression
- Decision Tree Classifier
- Random Forest Classifier

Best model in case of undersampling : LOGISTIC REGRESSION

Best model in case of Oversampling : RANDOM FOREST CLASSIFIER

FINAL MODEL CHOSED FOR PRODUCTION: RANDOM FOREST CLASSIFIER after applying Oversampling on whole dataset