Analysing Credit Card Fraud Detection

Context:

It is important that credit card companies are able to recognise fraudulent credit card transaction so that customers are not charged for items that they did not purchase in this project we will be implementing anamoly detection to detect whether there is any fraudulent transaction.

This project aims in analysing Fraud transactions in credit card - a compilation of various metrics. This Project involves cleaning and transforming data according to the requirements also applying techniques to prepare data and to execute various ML models on the data.

Content:

The dataset contains transactions made by credit cards.

This dataset presents transaction that occurred in two days, where we have 492 frauds out of 284807 transactions. The dataset is highly unbalanced, the frauds account for 0.172% of all transactions.

It contains only numerical input variables which are result of PCA transformation unfortunately due to confidentiality issues we cannot profit the original features and more background information about the data features V1, V2, … V28 are the principal components obtained with PCA the only features which have not been transformed with PCA are time and amount feature time contains the speed elapsed between transaction and the first transaction of the data set the feature amount is the transaction amount this feature can be used for example and it takes value 1 in case of fraud and zero otherwise.

Tasks to be performed:

* Data Analysis
* Feature Engineering
* Model Building and Prediction using ML techniques
* Prediction