**Credit card fraud detection**

1. Project Overview

Online activities mainly involve purchasing products, electronic devices and other similar things in a regular basis. There are many online transaction methods particularly made for such activities, which ensures the security by authorizing the transfer of funds. The online transactions are achieved by different bank cards that, makes the process simple. Although they are having notable advantages they confront some of their drawbacks regarding the security. The credit card frauds can happen for many reasons, mainly to get access to non-accredited funds from the account. It is a responsibility of the bank to screen and protect the card details of the user while doing online transactions. Our approach is based on the Logistic Regression. Logistic Regression is a Machine Learning algorithm which is used for the classification problems, it is a predictive analysis algorithm and based on the concept of probability.

1. Problem Definition

Financial fraud is an ever growing menace with far reaching consequences in the finance industry, corporate organizations, and government. Fraud can be defined as criminal deception with intent of acquiring financial gain. High dependence on internet technology has enjoyed increased credit card transactions. As credit card transactions become the most prevailing mode of payment for both online and offline transaction, credit card fraud rate also accelerates.

3.Scope

Nowadays the frauds are more and more. We have used Logistic regression to detect the fraud. Logistic regression is a well-established statistical method for predicting binomial or multinomial outcomes. Multinomial Logistic Regression algorithm can produce models when the target field is a set field with two or more possible values.

4.Objectives

With the developments in information technology and improvements in communication channels, fraud is spreading all over the world, resulting in huge financial losses. Though fraud prevention mechanisms such as CHIP&PIN are developed, these mechanisms do not prevent the most common fraud types such as fraudulent credit card usagess. As a result, fraud detection is the essential tool and probably the best way to stop such fraud types. In this study, classification models based on Logistic Regression (LR) are developed and applied on credit card fraud detection problem.