NAAN MUDHALVAN: IBM PHASE – II

TECHNOLOGY: DATA SCIENCE

PROJECT TITLE: CREDIT CARD FRAUD

DETECTION

INTRODUCTION:

Credit card fraud causes many financial losses for customer and also for the organization. For this reason, in the past few years, many studies have been performed using machine learning techniques to detect and block fraudulent transactions

METHODOLOGY:

The proposed algorithm which is a hybrid of a modified FP Tree creation algorithm and Growth mining algorithm, is given below in two phases. The first phase constructs the FP Split Tree which is more efficient way to create candidate sets than FP Tree since the latter involves two complete scans of the database while the former does it once. The second phase involves mining the FP Split tree created using the growth algorithm.

INNOVATION FOR FRAUD DETECTION: Fraud detection system Customer OCSVM/ Transaction Feature Incoming extraction T2 control chart database transaction Algoritm Fraudulent transaction output Legitimate transaction Alarm to bank Allow transaction

FRADULENT TRANSACTIONS:

A fraudulent card transaction is an unauthorised transaction that is carried out with your credit card. The thief either physically steals your credit card, or steals your card information via phishing <u>credit card skimming</u> and uses it to make payments, or withdraw cash.

REDUSE STEPS FOR FRAUD DETECTION:

To reduce vulnerability to credit card fraud, businesses should invest in fraud prevention tools, implement strong security measures, train employees to recognize and prevent fraud, and stay informed about the latest fraud trends and best practices.

LEGITIMATE TRANSACTION:

We present in this paper two real time data driven fraud detection approaches without anomalies in the training set using one class support vector machine (OCSVM) [18] using the optimal kernel parameter selection and T 2 control chart [19]. Numerical results have shown that the proposed approaches lead to a high-level of detection accuracy and a low false alarm rate.

FRAUD DETECTION SYSTEM:

A credit card fraud detection system is typically composed of a set of two methods are OCSVM/T2 control chart, feature extraction. It have implements the credit card fraud detection innovations.

PREDICTIVE MODEL:

Predictive modelling is the development of models that can forecast future events, trends, or patterns based on historical data. Businesses use these models to make informed decisions for future detection.

