Credit Card Fraud Detection

Project Report submitted in partial fulfillment of the requirements for the award of the degree of

Master of Computer Application

In

Computer Application

by

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Under the supervision......



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Feb 2024

CERTIFICATE

This is to certify that the work contained in this Project report entitled with "Credit Card Fraud Detection" by *Priyanshu Gaur* Roll no. 22635 and *Vishesh Kumar* Roll no. 22665 is a faithful record of work that has been carried out by the student, under our supervision and the level of work is good for submission. To the best of my knowledge, this work has not been submitted for award of any degree or diploma to this University or elsewhere.

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DECLARATION

We declare that this project report titled "Credit Card Fraud Detection"

Submitted in partial fulfillment of the degree of Master of Computer Application

(M.C.A) is a record of original work carried out by me under the supervision of

Mr. Rama Nandan Tripathi, and has not formed the basis for the award of any

other degree or diploma, in this or any other Institution or University. In keeping

with the ethical practice in reporting scientific information, due

acknowledgements have been made wherever the findings of others have been

cited.

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ABSTRACT

As the world is rapidly moving towards digitization and money transactions are becoming cashless, the use of credit cards has rapidly increased. The fraud activities associated with it have also been increasing which leads to a huge loss to the financial institutions. Therefore, we need to analyze and detect the fraudulent transaction from the non-fraudulent ones. In this we present a comprehensive review of various methods used to detect credit card frauds. Here we implement different machine learning algorithms on an imbalanced dataset such as logistic regression, naive ayes, random forest with ensemble classifiers using boosting technique. An extensive review is done on the existing and proposed models for credit card fraud detection and has done a comparative study on these techniques. So Different classification models are applied to the data and the model performance is evaluated on the basis of quantitative measurements such as accuracy, precision, recall, f1 score, support, confusion matrix.

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ABBREVIATIONS

Abb.	Meaning
Fig.	Figure
DFD	Data Flow Diagram
ER	Entity Relationship
WIN	Windows
alloc	Allocation
async	Asynchronous
Bg	Background
No.	Number
Err	Error
ACK	Acknowledgement
MRI	Magnetic Resonance Imaging
MLP	Multilayer Perceptron
QOS	Quality of Service
Temp	Temperature
Obj	Objective
MSE	Mean Square Error
RMSE	Root Mean Square Error
MATLAB	Matrix Laboratory
Struct	Structure
PL	Player
ВМІ	Body Mass Index

