

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE – 43

UG SEMINAR ABSTRACT
Academic Year: 2020-21

DEPARTMENT: COMPUTER ENGINEERING

Seminar On: Predictive analytics for fraud/anomaly detection

By : Aamir Miyajiwala

Roll No. 31401

1. Name of The Topic: Credit Card Fraud Detection for imbalanced dataset.
2. Topic wise contents:
 - 1.Introduction
 - 2.Problem of imbalanced dataset
 - 3.Methods to counter imbalanced dataset.
 - 4.Comparison of methods.
 - 5.Conclusion
3. References Used:
 1. J. Wang, R. Martins de Moraes and A. Bari, "A Predictive Analytics Framework to Anomaly Detection," 2020 IEEE Sixth International Conference on Big Data Computing Service and Applications (BigDataService), Oxford, UK, 2020, pp. 104-108, doi: 10.1109/BigDataService49289.2020.00023.
 2. H.Tingfei et al. "Using Variational Auto Encoding in Credit Card Fraud Detection".IEEE Open Access 2020.
 3. O. S. Yee, S. Sagadevan, and N. H. A. H. Malim, "Credit card fraud detection using machine learning as data mining technique," J. Telecommun., Electron. Comput. Eng., vol. 10, nos. 1–4, pp. 23–27, 2018.

Date: 13/04/2021

Aamir Miyajiwala
Student

REMARKS BY UG SEMINAR CO-ORDINATOR:

Date: 13/04/21

UG Seminar Coordinator

P:F- SMR- UG / 02 / R0

Abstract:.

E-Commerce and the move towards cashless transactions has resulted in a significant increase in Debit/Credit Card usage. Consequently, this has resulted in a quantum increase in fraudulent transactions. Online fraudulent activities cost the global economy billions of dollars each year. Detecting and preventing anomaly cases like fraudulent activities is an important task for banks, insurance companies and small businesses. One major problem in building a predictive model for anomaly detection , is the scarcity of anomalous or fraudulent data records in comparison to non-anomalous or non-fraudulent data which makes training imbalanced which will affect the classifier's performance in bad way making it biased. This work explores the use of predictive analytics for detecting anomaly cases by mitigating the problem of imbalanced datasets using sampling and data augmentation techniques. This approach can be adapted to other domains also where anomalous data is scarce.

Keywords: Predictive Analytics, imbalanced dataset, anomaly detection, credit card.

REMARKS BY UG SEMINAR GUIDE:

Date: 13/04/21

UG Seminar Guide
(Prof. A. A. Chandorkar)

Approval from mentor



aachandorkar

to me ▾

8:11 PM (2 hours ago)



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