FRAUD DETECTION USING MACHINE LEARNING

INTRODUCTION

Financial fraud is increasing with growth of banking services and technology. Credit card fraud is a major problem in financial services and cost billions of dollars every year. Credit card fraud continues to increase due to imbalanced and non-stationary nature of data. Fraudsters around the world look new ways to commit fraud. In this paper we will see how machine learning approach is used for fraud detection. Machine learning processes large datasets and are able to recognize various patterns using algorithms which increases the speed, scale and efficiency of fraud detection.

WHY IS THIS DATA SCIENCE

Fraud detection using traditional rule based are less effective. Since fraud attacks have become more sophisticated, rules become complex and error prone. Hence Machine Learning algorithms are used to improve stability and accuracy.

DELIVERABLE

The objective of this project is to understand the challenges faced in credit card fraud detection and see how bagging ensemble classifier based on decision tree is used to overcome the problem. It works by combining classification of randomly generated training datasets to form final prediction.

LITERATURE

3.https://ieeexplore.ieee.org/abstract/document/8123782

13.https://reader.elsevier.com/reader/sd/pii/S1877050915007103?token=0913C2F829D71C3488BA577CCE9AC45E74F39A48C530241FA918D913563FBA18CD3BD17E61669FA2DB21980C37FCF9FC

CONCLUSION

Credit card fraud detection is becoming important these days as different types of attacks are increasing. Financial industries are incorporating machine learning methodologies into their fraud detection system. In this project, bagging ensemble classifier technique using Machine Learning is explained to detect fraudulent transactions.

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