<Credit card fraud detection >

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Introduction to Problem Statement

Credit card frauds are one of the online fraud types that can easily be done .As E-commerce and many other online sites have increased the online payment modes,it increases the risk for online frauds. Increase in fraud rates, researchers started using different machine learning methods to detect and analyse frauds in online transactions

Existing Resources

There are many resources available online and people implemented many algorithm to detect fraud but yet no one come with a good solution since data is imbalanced that available on open source
yet highest accuracy that is achieved with The accuracy is 0.9995611109160493 The precision is 0.9866666666666667 The recall is 0.7551020408163265 The F1-Score is 0.8554913294797689

Proposed Solution

In my solution The accuracy is 1 The precision is 0.9866666666666667 The recall is 0.83 The F1-Score is 0.90

Methodology & Progress (Mention the work done week-wise)

Week 1 learning python from resources given by mentor
Week 2 learning machine learning algorithm from resources given by mentor and reading some research paper related to credit card fraud
Week 3 handling imbalance data and data cleaning using imbalanced learn library
Week 4 applying machine learning algorithm

Results

https://github.com/PriyansuRamiitb/Credit_card_Fraud_Detection

References and Citations

1.Changjun Jiang, et al.
"Credit Card Fraud Detection: A Novel Approach Using Aggregation Strategy and Feedback Mechanism."
IEEE Internet of Things Journal, 5 (2018), pp. 3637-3647

2.Mohammed, Emad, and Behrouz Far. "Supervised Machine Learning Algorithms for Credit Card Fraudulent Transaction Detection: A Comparative Study." IEEE Annals of the History of Computing, IEEE, 1 July 2018,

3.Xuan, Shiyang, et al. "Random Forest for Credit Card Fraud Detection." 2018 IEEE 15th International Conference on Networking, Sensing and Control (ICNSC), 2018,

4.Awoyemi, John O., et al. "Credit Card Fraud Detection Using Machine Learning Techniques: A Comparative Analysis." 2017 International Conference on Computing Networking and Informatics (ICCNI), 2017