

Credit Card Fraud Detection using Machine Learning

Naga Ashwini Nayak V J¹, C. Suchika², N Sandhya³, M Lakshmi⁴, Roja J⁵

Assistant Professor. Department of Computer Science and Engineering¹

Students, Department of Computer Science and Engineering^{2,3,4,5}

Rao Bahadur Y Mahabaleswarappa Engineering College, Bellary, Karnataka, India

Abstract: Credit card fraud detection is presently the most frequently occurring problem in the present world. We made an attempt for finding the frauds in the credit card business by using the algorithms which adopted machine learning techniques. We are using Decision Tree, Random Forest, and Extreme Gradient boosting algorithms. The efficiency of the model can be decided by using some public data as sample. Then, an actual world credit card facts group from a financial institution is examined. Along with this, some clutter is supplemented to the data samples to auxiliary check the sturdiness of the systems. The significance of the methods used in the paper is the first method constructs a tree against the activities performed by the user and using this tree scams will be suspected. In the second method a user activity-based forest will have constructed and using this forest an attempt will be made in identifying the suspect. The investigational outcomes absolutely show that the mainstream elective technique attains decent precision degrees in sensing scam circumstances in credit cards.

Keywords: XG-Boost, K-Nearest Neighbor (KNN), Decision Tree, Logistic Regression, Support Vector Machine (SVM)

REFERENCES

- [1] Sarah Alexandria Ebiaredoh-Mienye, Ebenezer Esenogho and (2020). Effective Feature Learning using Stacked Sparse Autoencoder for Improved prediction of Credit Card Default. Effective Feature Learning using Stacked Sparse Auto-encoder for Improved prediction of Credit Card Default.
- [2] Somayeh Moradi and Farimah Mokhatab Rafiei (2019). A dynamic credit risk assessment model with data mining techniques: evidence from Iranian banks. Moradi and Mokhatab Rafiei Financial Innovation, springer. doi.org/10.1186/s40854-019-0121-9.
- [3] Vaishnavi Nath Dornadula and Gheeta S (2019) Credit Card Fraud Detection using Machine Learning Algorithms. International Conference On Recent Trends In Advanced Computing. Pp 631-641. doi-10.1016/j.procs.2020.01.057.
- [4] Devi Meenakshi, Janani, Gayathri (2019). Credit Card Fraud Detection Using Random Forest. International Research Journal of Engineering and Technology (IRJET). Vol 6(3).