IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 7, May 2023

Anomaly Detection in Credit Card Transaction and Analysis Using Microsoft Power BI

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Abstract: Nowadays, a huge amount of crime and fraud takes place. Similarly, fraud in credit cards occurs when a transaction is being done. To evaluate and visualize credit card fraud transactions we implement this project. Detecting Anomaly (Outliers) in credit card transactions using Pycaret library. Microsoft Power BI is the most trending tool to prepare dashboards and reports for getting meaningful insight from the data and helps to take business-driven decisions. Hence Microsoft helps to visualize anomalies in credit card transactions. Anomaly Detection is one of the important and new features of Microsoft Power BI. Pycaret being an open-source low-code machine library in python helps to detect the anomaly. The output which contains the outliers will be represented in the form of illustrative visuals, which will be easy to understand and interpret. Since the number of transactions is done throughout the year. Developing a Dashboard that helps to visualize the total history of transactions based on the dataset. Creating reports based on credit card transactions for a time span. With amazing visuals and creativity, it becomes quick to understand what the data is telling the stakeholder or company management.

Keywords: Credit Card, Anomaly, Pycaret, Power BI.

REFERENCES

[1] Dr. Urmila R. Pol 1 And Dr. Tejshree U. Sawant 2, Automl: Building An Classification Model With Pycaret, YMER || ISSN : 0044-0477

[2] Meenu, Swati Gupta, Sanjay Patel, Surender Kumar, Goldi Chauhan International Journal of Innovative Research in Computer Science & Technology (IJIRCST) ISSN: 2347-5552, Volume-8, Issue-3, May 2020

[3] S P Maniraj, Aditya Saini, Swarna Deep Sarkar Shadab Ahmed Credit Card Fraud Detection using Machine Learning and Data Science Assistant Professor (O.G.) International Journal of Engineering Research & Technology (IJERT). Published by : www.ijert.org Vol. 8 Issue 09, September-2019

[4] Vijay Krishnan S, Bharanidharan G, Krishnamoorthy Research Data Analysis with Power BI 11th International CALIBER-2017 Anna University, Chennai, Tamil Nadu 02-04 August 2017 © INFLIBNET Centre, Gandhinagar, Gujarat

[5] Asheesh Kumar Dwivedi, Ashish Kumar Rai, Ashish Kashyap Fraud Detection in Credit Card Transactions using Anomaly Detection Turkish Journal of Computer and Mathematics Education Vol.12 No.12 (2021), 837-846

[6] Jain, Y. & Tiwari, N. & Dubey, S. & Jain, Sarika. (2019). "A comparative analysis of various credit card Fraud detection techniques" in International Journal of Recent Technology and Engineering. 7. 402-407.

[7] Isolation forests for anomaly detection improve fraud detection.", Blog Total Fraud Protection, 2019 [Online]. 18. https://blog.easysol.net/using-isolation-forests-anamoly-detection/ [Accessed 06 December 2020].

[8] Pourhabibi, T.; Ong, K.-L.; Kam, B.H.; Boo, Y.L. Fraud detection: A systematic literature review of graph-based anomaly detection, approaches. Decis. Support Syst. 2020, 133, 113303. [CrossRef]

[9] 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

[10] Credit card fraud detection using Machine Learning Techniques John O. Awoyemi, Adebayo O. Adetunmbi, Samuel A. Oluwadare IEEE 2017

[11] https://www.sumproduct.com/blog/article/power-bi-tips/power-bi-blog-anomaly-detection

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