

Credit Card Fraud Detection using Machine Learning

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Abstract: *In today's world the credit card fraud is the biggest issue and now there is need to combat against the credit card fraud. "credit card fraud is the process of cleaning dirty money, thereby making the source of funds no longer identifiable." On daily basis, the financial transactions are made on huge amount in global market and hence detecting credit card fraud activity is challenging task. As earlier (Anti- credit card fraud Suite) is introduced to detect the suspicious activities but it is applicable only on individual transaction not for other bank account transaction. To Overcomes issues of we propose Machine learning method using 'Structural Similarity', to identify common attributes and behaviour with other bank account transaction. Detection of credit card fraud transaction from large volume dataset is difficult, so we propose case reduction methods to reduces the input dataset and then find pair of transaction with other bank account with common attributes and behaviour.*

Keywords: Credit Card Fraud

REFERENCES

- [1]. "Fatf-gafi.org - Financial Action Task Force (FATF)", Fatf-gafi.org,2016. [Online]. Available: <http://www.Fatf-gafi.org>. [Accessed: 22-Dec- 2015].
- [2]. Fatf-gafi.org, 'credit card fraud - Financial Action Task Force (FATF)', 2014. [On- line]. Available: <http://www.fatfgafi.org/faq/moneylaundering/>. [Accessed: 22- Dec- 2015].
- [3]. Neo4j Graph Database, 'Neo4j, the World's Leading Graph Database', 2014. [On- line]. Available: <http://neo4j.com/>. [Accessed: 22- Dec- 2015].
- [4]. A. C. Bahnsen, A. Stojanovic, D. Aouada, and B. Ottersten. Improving credit card fraud detection with calibrated probabilities. In SDM, 2014.
- [5]. M. Gupta, J. Gao, C. C. Aggarwal, and J. Han. Outlier Detection for Tempo- ral Data. Synthesis Lectures on Data Mining and Knowledge Discovery, Morgan Claypool Publishers, 2014.
- [6]. Clarke, M. 1994. 'Fraud and the Politics of Morality'. Business Ethics: A European Review, 3: 2, 117-122.
- [7]. Encyclopedia Britannica, no date. Credit Card. (Accessed: October 2008).
- [8]. Euromonitor International, 2006. Financial cards in Germany Available (Accessed: November 2006).
- [9]. European e-Business Market Watch. 2005. ICT Security, e-Invoicing and e-Payment Activities in European Enterprises, Special Report, September.
- [10]. Ezawa, K. Norton, S. 1996. 'Constructing Bayesian Networks to Predict Uncollectible Telecommunications Accounts'. IEEE Expert, October; 45-51.