

Review of: "Predicting Mobile Money Transaction Fraud using Machine Learning Algorithms"

Dr Abdul Shaikh¹

¹ Sultan Qaboos University

Potential competing interests: No potential competing interests to declare.

The paper proposed an interesting fraud detection model that detects suspicious transactions from mobile money transactions using machine learning.

The paper is very well written, A logistic regression algorithm is used as the baseline model and the model compares with ensembles and gradient descent models. Based on the experiment results, The author claim that the random forest classifier had the most outstanding performance among all measures. The paper also discusses how artificial intelligence can help to mitigate the risk of mobile money fraud and money laundering in mobile transactions.

The Literature review is found to be a bit weak as the author should discuss some key papers such as (Jullum, et al (2020). Detecting money laundering transactions with machine learning. Journal of Money Laundering Control, 23(1), 173-186. and should avoid providing the definition of algorithms in the literature review section but rather discuss how these algorithms have been used in various applications and should provide a critical view in terms of comparing and contrasting the results.

In the introduction section, the author mentioned that "The ML approach, which uses real-time analysis, can quickly spot transactions that could be fraudulent and stop them from going through and reduce the number of fraudulent transactions" I could not find any example that it shows the model runs on real-time transaction and results are based on the real time transaction.

Also, the author should clearly mention that during the generation of data, what criteria have to adapt to make the transaction fraud.

Some typos were found such as "stimulators" on page 7

The author should use at least six month's dataset of transactions as one month of data is not enough to learn the pattern for Machine learning,

Overall, the paper is interesting and worth reading it.