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Fraudulent Transaction Detection in Bitcoin Network Based on Unsupervised Learning

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Abstract

Financial frauds usually means, changing the ownership of property through illegal ways. Fraud is a crime. In financial world frauds take place due to many reasons. Bitcoin is a cryptocurrency (Digital currency) based on blockchain technology introduced in 2009. Frauds are common in bitcoin transactions as well as in traditional transaction methods.

Bitcoin transaction process is very different from traditional systems. Due to the pseudonymous behavior of bitcoin reported/identified frauds are very low.

This project aims to identify potential frauds by analyzing the blockchain transaction dataset with the help of anomaly detection and unsupervised learning methods. Some of the known cases detected throughout this analysis.

Keywords

Bitcoin, Blockchain, Bitcoin frauds, Anomaly detection, Unsupervised learning, Clustering