

عنوان مقاله:

Prediction forks in the blockchain using machine learning

محل انتشار:

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خلاصه مقاله:

A blockchain is a distributed cryptographic ledger that uses a peer-to-peer (P2P) network to reach a consensus and monitor the validity of the operations performed. Blockchain technology has attracted considerable attention due to properties such as security, immutability, verifiability, and monitorability. However, it still faces significant problems such as majority attacks, forks, and scalability. A fork is an event that causes a blockchain to diverge into two potential splits. It occurs when there is a disagreement between miners on how to reach a consensus. In addition to creating security risks, a blockchain fork increases the cost, time, and energy consumption. Recently, the integration of blockchain and machine learning (ML) has received considerable attention. This study aims to investigate the feasibility of using ML for predicting blockchain forks and reducing their subsequent risks and costs. To this end, we compared the accuracy and effectiveness of four well-known machine learning methods in predicting blockchain forks.

کلمات کلیدی:

Blockchain; Fork; Machine learning; Data Mining

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