

# Systematic Analysis of DDoS Attacks in Blockchain

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**Abstract**—With the expansion of the internet, the identification and recuperation of digital attacks have become a primary concern for digital businesses. Damage brought about by network attacks has caused far and wide concern. Distributed Denial of Service (DDoS) attack is a dangerous digital attack. It's an attack that annihilates the network and can cause multiple computers to be assaulted simultaneously, fizzling to perform service appropriately. A blockchain-based DDoS recognition model is proposed for the systematic evaluation of DDoS attacks to understand the vulnerabilities of the Blockchain better. The advantage of Blockchain is that Blacklisted IP addresses are effectively stored. The use of such a framework gives the benefit of additional security components over existing DDoS moderation frameworks. This paper has assessed the Tab Transformer, the XGBoost, and the Random Forest algorithm to discover the better classifying algorithm. Tree-Based classifier procedure utilized for feature selection to boost the computational time. Out of the three algorithms, the Tab Transformer gives an accuracy of about 97% real-time investigation of the attacks.

**Keyword**—DDoS (Distributed Denial of Service), Blockchain, Machine learning (ML) Algorithm, Tab Transformer, Random Forest, XGBoost.

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