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## Utilize 5G Mobile Connection as a Node in the Proof of Authority Blockchain Used for Microtransaction

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**Abstract :** The paper contributes to the feasibility of using a 5G mobile connection as a node for a Proof of Authority (PoA) blockchain, which is used for microtransactions at the same time. It uses the phone number identity of the users that are linked to the crypto wallet address. It also proposed a consensus protocol based on Proof-of-Authority (PoA) blockchain; PoA is a permission blockchain where consensus is achieved through a set of designated authority rather than through mining, as is the case with a Proof of Work (PoW) blockchain. This report will first explain the concept of a PoA blockchain and how it works. It will then discuss the potential benefits and challenges of using a 5G mobile connection as a node in such a blockchain, and finally, the main open problem statement and proposed solutions with the requirements.

Keywords: 5G, mobile, connection, node, PoA, blockchain, microtransaction

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