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An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends

Mr. Dattaprasad Patil[1] and Mrs. Vijaya Bhosale[2]
Student, M.Sc. I.T., I. C. S. College, Khed, Ratnagiri, Maharashtra, India[1]
Asst. Prof., Department of I.T., I. C. S. College, Khed, Ratnagiri, Maharashtra, India[2]

Abstract: *Blockchain, which is the backbone of Bitcoin, has recently received a lot of attention. Blockchain functions as an immutable ledger that enables decentralized transactions. Numerous fields, such as the Internet of Things (IoT), reputation systems, and financial services, are being covered by blockchain-based applications. However, blockchain technology still faces numerous difficulties, such as scalability and security issues, that need to be resolved. A comprehensive overview of blockchain technology is provided in this paper. First, we compare some common consensus algorithms utilized by various blockchains and provide an overview of the architecture of blockchains. In addition, a brief list of recent advancements and technical difficulties is provided. In addition, we outline potential blockchain trends for the future.*

Keywords: Blockchain, decentralization, consensus, scalability

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