Cognitive Computing: Bridging Human and Machine Intelligence

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Abstract

This paper presents a novel approach to decentralized AI that utilizes blockchain technology to enhance data privacy. By combining federated learning with blockchain's immutable ledger, we create a secure framework that allows multiple parties to collaborate on AI model training without exposing sensitive data. Our findings show that this method not only preserves privacy but also improves model performance through diverse data contributions. This paradigm shift offers significant implications for industries requiring stringent data protection, such as healthcare and finance.

Keywords: Decentralized AI, blockchain, data privacy, federated learning, healthcare.