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## AI and Blockchain: Transforming Digital Transactions

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Abstract: In the digital age of today, keeping transactions safe and effective has become increasingly important. Blockchain technology and Artificial Intelligence (AI) can potentially change the way digital transactions are conducted. The synergy between AI and Blockchain is the focus of this study, which also looks at how their integration has a profound effect on transaction security, efficiency, and transparency. After providing an overview of the fundamentals of AI and Blockchain, the paper delved into the potential advantages of their collaboration, including the development of smart contracts, improved transaction efficiency, and enhanced security protocols. Case studies from a variety of industries show how AI and Blockchain can be used in real-world applications while addressing issues like technical obstacles, privacy concerns, and regulatory considerations. The dynamic evolution of AI and Blockchain as catalysts for secure, efficient, and transparent digital transactions is highlighted in the paper's conclusion with insights into emerging trends, future perspectives, and resources for further exploration.

Keywords: Artificial Intelligence, Blockchain, Digital Transactions

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