

Blockchain technology could help to solve some systemic problems arising from artificial intelligence (AI). The unique blockchain features, such as decentralisation, immutability, and transparency, offer solutions to issues of trust, data integrity, and ethical compliance associated with AI technologies.

Blockchain can contribute significantly to enhancing the trust and transparency of AI systems. Due to their “black-box” nature, AI algorithms, especially models involved in complex decision-making processes, often face trust issues, where the decision-making process is not transparent to users. By providing an immutable record of the AI algorithm’s development, training, and deployment processes, blockchain can help address this issue. Stakeholders can audit and verify the AI process by recording every step in the blockchain, then it will enhance trust in AI systems (Bousquette, 2024).

Blockchain can also be a key player in ensuring the ethical use of AI. It can be used to verify and ensure that AI is deployed in an ethically manner, especially in important fields such as supply chain management and healthcare. Blockchain with the immutable and transparent nature helps in maintaining the integrity and reliability of data used for training AI algorithms, which is essential for ethical AI development (European Parliamentary Research Service, 2020).

To fight against digital misinformation and deepfakes – AI-generated synthetic media – blockchain’s role is increasingly being acknowledged. Blockchain systems can track the creation, modification, and distribution of digital content, which enables the authenticity and origin verification of the content (Harrison & Leopold, 2021). This can be helpful in locating and stopping the spread of AI-generated deepfakes and misinformation, which are serious issues in today's digital environment.

The creation of decentralized AI platforms may also result from Blockchain's integration with AI. These platforms can function in a way that reduce risks associated with centralized control of AI technologies, such as data monopolies and biases (Ho, 2024). Decentralized AI on a blockchain can ensure more democratic access to AI resources and help distribute the advantages of these technologies.

However, implementing blockchain solutions in AI can be challenging. The broad adoption of blockchain in various industries, especially in media for tracking content authenticity, requires widespread acceptance and integration. Additionally, ensuring the privacy and security of data within blockchain systems is paramount for their effective use in AI (Robinson, 2023).

In conclusion, blockchain technology present a feasible solution to some systemic problems presented by AI, such as misinformation, trust issues, ethical concerns, and centralized control. Blockchain with the ability to provide transparent, secure, and immutable records may become a valuable tool in enhancing the credibility and ethical deployment of AI systems. However, to fully utilize blockchain's potential in AI will require overcoming technological and adoption challenges and ensuring that blockchain-based systems are used under the governance control and ethical frameworks.

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