Developing a Blockchain-Based System for Covert Steganographic Communication

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Abstract

In the digital age, the relentless advancement of communication technologies has brought forth both unprecedented opportunities and new challenges in data security. While cryptography has long served as the cornerstone for protecting the confidentiality of information, its presence alone can be a signal that sensitive data is being exchanged, thus potentially inviting scrutiny or attack. Steganography, in contrast, aims to conceal not only the content of a message but also the very existence of communication, offering a deeper layer of security by embedding covert messages within innocuous-looking carriers.

Keywords

Blockchain, cryptography, steganography, EMR, government, e-governance.