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Small But Mighty: The Power of Lightweight **Cryptography in IoT**

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Abstract: The Internet of Things (IoT) has brought about significant changes to various domains such as healthcare, transportation, and manufacturing. However, security remains a critical challenge in IoT due to the large number of connected devices with varying processing capabilities and memory constraints. Traditional cryptographic algorithms are not well-suited for IoT devices due to their high computational and memory requirements. Lightweight cryptography algorithms have emerged as a promising solution for securing IoT devices with limited resources. In this abstract, we provide an overview of lightweight cryptography algorithms for IoT, including their design principles, security properties, and performance evaluation.

Keywords: Lightweight cryptography, Internet of Things (IoT), Security

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