

# Simplified AES algorithm for healthcare applications on Internet of Thing

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## **Abstract:**

Internet of things is promising to change the world to a better one with its tremendous applications in our daily lives where all physical objects will be connected to each other including humans. One major category of Internet of Things applications falls in the health industry, where sensors collect and register critical measurements such as updates about pressure and glucose. Encryption is a crucial issue to consider for maintaining the privacy of data in health applications. An efficient way of encryption with low power consumption is desired for Internet of Things. In this research, an energy-efficient encryption mechanism is proposed by modifying the AES algorithm to be suitable for Internet of Things sensors. The updated algorithm is evaluated and session time is compared to brute force time.

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