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Safeguarding Tomorrow: A Comprehensive Review of Internet of Things Security Measures

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Abstract

This review explores the critical security aspects of the Internet of Things (IoT), emphasizing the necessity of continuous security monitoring and the establishment of robust incident response plans. Throughout the exploration, a comprehensive and layered approach to IoT security is underscored, acknowledging the interconnectedness of devices and the dynamic nature of the threat landscape. The review delves into various security components, including device and communication security, network and cloud considerations, and physical security. It addresses vulnerabilities, such as default passwords, lack of device authentication, and inadequate encryption, while proposing cryptographic, intrusion detection, and machine learning-based solutions. The paper also discusses security requirements, common attacks, and challenges, emphasizing the need for collaboration, education, and adherence to industry standards in securing the IoT ecosystem.

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A PROFOUND ANALYSIS OF IOT TECHNOLOGY IN AGRICULTURE SECTOR

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Abstract

Agricultural Internet of Things (IoT) has brought new changes to agricultural production. It not only increases agricultural output but can also effectively improve the quality of agricultural products, reduce labor costs, increase farmer's income, and truly realize agricultural modernization and intelligence. This paper systematically summarizes the research status of agricultural IoT.

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