

IoT Security Risks: Challenges and Solutions for a Connected World

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Abstract: *The quick development of Internet of Things technology has redefined our connected environment by creating thousands of new applications. Extended connectivity brings substantial security hazards that need solution to safeguard user privacy and safety. This research paper evaluates the primary security threats in IoT through analysis of design flaws in devices combined with network security weaknesses and data protection failure. This study analyzes upcoming methods and proven practices which help minimize security risks which focus on device security design and network partitioning and sophisticated hazard recognition. Through the Internet of Things, we now interact differently with our environment because its vast connected device network collects data which undergoes processing before exchanging information. The extensive accessibility has produced security weaknesses that criminal groups can use to harm systems.*

Keywords: IoT, Blockchain, Machine Learning, Big Data, Cyber Security

