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Security and privacy analysis of youth-oriented connected devices

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Abstract-

Under the Internet of Things paradigm, the emergence and use of a wide variety of connected devices and personalized telematics services have proliferated recently. As a result, along with the penetration of these devices in our daily lives, the users’ security and privacy have been compromised due to some weaknesses in connected devices and underlying applications. This article focuses on analyzing the security and privacy of such devices to promote safe Internet use, especially by young people. First, the connected devices most used by the target group are classified, and an exhaustive analysis of the vulnerabilities that concern the user is performed. As a result, a set of differentiated security and privacy issues existing in the devices is identified. The study reveals that many of these vulnerabilities are related to the fact that device manufacturers often prioritize functionalities and services, leaving security aspects in the background. These companies even exploit the data linked to the use of these devices for various purposes, ignoring users’ privacy rights. This research aims to raise awareness of severe vulnerabilities in devices and to encourage users to use them correctly. Our results help other researchers address these issues with a more global perspective.

Index Terms- Connected Devices; Internet of Things; Privacy; Security; Vulnerability

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