

Analysis of security and privacy issues in wearables for minors

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Abstract-

The increased use of wearables in recent years has fostered a great technological development in this area, although without the appropriate supervision usability may go first than security. In addition to this, the fact that wearables have been requiring more and more personal data from the user makes them attractive devices for an attacker. In this paper we propose a set of tests for evaluating the security and privacy of wearables and we apply them to analyse the security and privacy of a set of commercial wearables that are targeted at minors, who represent a group with especially high requirements in this regard. We define the testing scenario, expose the tools to support the research, and specify the testing process to be followed. Based on the obtained results, although the considered low-end devices are broadly speaking less secure than high-end ones, most of them present security and privacy flaws, which illustrates the necessity of regulation that ensures the fulfilment of appropriate security and privacy requirements.

Index Terms- Cybersecurity, Internet of Things, Minors, Privacy, Wearables

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Citation:

Álvarez-Campana, M.; Fúster de la Fuente, J.; López, G.; Palacios, R.; Pérez, J.; Solera-Cotanilla, S.; Vega-Barbas, M. "Analysis of security and privacy issues in wearables for minors", Wireless Networks, vol.30, no.6, pp.5437-5453, August, 2024.