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The future of data privacy and security concerns in Internet of Things (Conference Paper)

Solangi, Z.A.^a, Solangi, Y.A.^b, Chandio, S.^c, Aziz, M.B.S.A.^a, Bin Hamzah, M.S.^a, Shah, A.^a

^aKulliyah of Information and Communication Technology, International Islamic University Malaysia, Kuala Lumpur, Malaysia

^bComputer Science Department, Shah Abdul University, Khairpur, Pakistan

^cInstitute of Mathematics and Computer Science, University of Sindh Jamshoro, Pakistan

Abstract

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A global, immersive, invisible, ambient network-computing environment built through the continued proliferation of smart sensors, cameras, software, databases, and massive data centers in a world-spanning information fabric known as the Internet of Things. The idea is to live in connected world. Altogether varieties of connected objects from smart home appliances like televisions, laundry machines, thermostats, refrigerators to Industrial Internet of Things (IIoT) and Internet of Medical Things (IoMT) are going to conserve the potential of IoT connectivity in all paces of future smart world. However, it has high importance to preserve adherence of enormous benefits of IoT connectivity, which might lead to unseen security and privacy issues and vulnerabilities that will cause various malicious attacks including waterhole, ransomware, eavesdropping, and others to exploit the potential of smart objects. This paper will present and forecast advanced concepts for end-to end security and privacy issues in a highly distributed, heterogeneous and dynamic network of IoT devices, which may reveal a holistic approach of device identification, authentication, and management, security, and privacy concerns. © 2018 IEEE.

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