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SECURE IOT AND CLOUD COMPUTING INTEGRATION

Ms Anuska Sharma*

*Sanskriti University,
Mathura, Uttar Pradesh, INDIA
Email id: anushka@sanskriti.edu.in

ABSTRACT

Mobile Cloud computing is a relatively new technology that refers to an infrastructure that stores and processes data outside of the mobile device. The Internet of Things is a relatively new technology. The Internet of Things (IoT) is a relatively new telecommunications technology that is quickly gaining traction. IoT is more particularly linked to wireless telecommunications. The primary aim of wireless network-based interaction and collaboration amongst things and objects is to achieve the goal established for them as a united entity. Furthermore, both Cloud Computing and the Internet of Things are rapidly developing technologies in the area of wireless communications. We provide a review of IoT and Cloud computing in this article, with an emphasis on the security concerns that both technologies face. We specifically integrate the two aforementioned technologies (Cloud Computing and IoT) in order to investigate the common characteristics and advantages of their integration. Finally, we will discuss Cloud Computing's contribution to IoT technologies. As a result, it demonstrates how Cloud Computing technology enhances IoT functionality. Finally, we look at the security issues that come with combining IoT with Cloud Computing.

KEYWORDS: *Internet of Things, Cloud Computing, Mobile Cloud Computing, Security, Privacy.*

REFERENCES

1. M. A. Khan and K. Salah, "IoT security: Review, blockchain solutions, and open challenges," *Futur. Gener. Comput. Syst.*, 2018.
2. R. S. Sinha, Y. Wei, and S. H. Hwang, "A survey on LPWA technology: LoRa and NB-IoT," *ICT Express*. 2017.

3. A. Panarello, N. Tapas, G. Merlino, F. Longo, and A. Puliafito, "Blockchain and iot integration: A systematic survey," *Sensors (Switzerland)*. 2018.
4. M. Ammar, G. Russello, and B. Crispo, "Internet of Things: A survey on the security of IoT frameworks," *J. Inf. Secur. Appl.*, 2018.
5. A. H. Ngu, M. Gutierrez, V. Metsis, S. Nepal, and Q. Z. Sheng, "IoT Middleware: A Survey on Issues and Enabling Technologies," *IEEE Internet Things J.*, 2017.
6. R. A. Khan and A. S. K. Pathan, "The state-of-the-art wireless body area sensor networks: A survey," *Int. J. Distrib. Sens. Networks*, 2018.
7. H. M. Jawad, R. Nordin, S. K. Gharghan, A. M. Jawad, and M. Ismail, "Energy-efficient wireless sensor networks for precision agriculture: A review," *Sensors (Switzerland)*. 2017.
8. K. S. Mulyarchik and A. S. Polochanskiy, "Quality of service in wireless sensor networks," *Zhurnal Beloruss. Gos. Univ. Mat. Inform.*, 2017.
9. Y. Zou, J. Zhu, X. Wang, and L. Hanzo, "A Survey on Wireless Security: Technical Challenges, Recent Advances, and Future Trends," *Proceedings of the IEEE*. 2016.
10. O. Ur-Rehman and N. Zivic, "Wireless communications," in *Signals and Communication Technology*, 2018.