# Use of AIOT in Health System

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## ARTICLEINFO

Article History: Received Oct. 11, 2021 Revised Nov. 15, 2021 Accepted Nov. 30, 2021

## Keywords:

Blockchain, Hash codes, Transaction, Electronic Health Care, Metadata, Throughput, Latency Correspondence: E-mail: Imamza16@gmail.com

#### ABSTRACT

IoT in healthcare is the important thing player in providing better scientific centers to the patients and enables the doctors and hospitals as well. The proposed system right here consists of numerous medical gadgets such as sensors and internet based or mobile based totally packages which communicate through community related gadgets and facilitates to screen and record patients' health information and clinical facts. The proposed outcome of the paper is to construct a system to provide international-class scientific useful resource to the sufferers even inside the remotest regions without a hospitals of their regions by using connecting over the internet and greedy facts via about their health status through the wearable devices supplied in the kit using a raspberry pi microcontroller which might be able to report the patient's coronary heart price, blood strain. The device would be clever to intimate the affected person's family members and their physician approximately the affected person's current fitness status and complete clinical statistics in case any scientific emergency arises. The amassed records can be used to research and expect chronic issues or different sicknesses including coronary heart assaults in preliminary degree itself the usage of the facts mining strategies so as to also offer the approach wonderful for decision making.

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#### References

- [1] Perumal, K., & Manohar, M. (2017). A survey on internet of things: case studies, applications, and future directions. In Internet of Things: Novel Advances and Envisioned Applications (pp. 281-297). Springer, Cham.
- [2] Yeole, A. S., & Kalbande, D. R. (2016, March). Use of Internet of Things (IoT) in healthcare: A survey. In Proceedings of the ACM Symposium on Women in Research 2016 (pp. 71-76).
- [3] Hong, J. K. (2018). Performance analysis of dual-polarized massive MIMO system with human-care IoT devices for cellular networks. Journal of Sensors, 2018.
- [4] Lee, J., Hong, M., & Ryu, S. (2015). Sleep monitoring system using kinect sensor. International Journal of Distributed Sensor Networks, 11(10), 875371.
- [5] King, D. (2014). Marketing wearable home baby monitors: real peace of mind?. Bmj, 349, g6639.
- [6] P. S. Low, S. S. Shank, T. J. Sejnowski, and D. Margoliash, "Mammalian-like features of sleep structure in zebra finches," Proceedings of the National Academy of Sciences of the United States of America, vol. 105, no. 26, pp. 9081–9086, 2008.
- [7] International Journal of Distributed Sensor Networks Volume 2015, Article ID 875371, 9 pages, http://dx.doi.org/10.1155/2015/875371.
- [8] Kelly, J. M., Strecker, R. E., & Bianchi, M. T. (2012). Recent developments in home sleep-monitoring devices. ISRN neurology, 2012.

- [9] B. G. Ahn, Y. H. Noh, and D. U. Jeong. Smart chair based on multi heart rate detection system. In 2015 IEEE SENSORS, pages 1–4, Nov 2015.
- [10] S. H. Almotiri, M. A. Khan, and M. A. Alghamdi. Mobile health (m-health) system in the context of iot. In 2016 IEEE 4th International Conference on Future Internet of Things and Cloud Workshops (FiCloudW), pages 39–42, Aug 2016.
- [11] T. S. Barger, D. E. Brown, and M. Alwan. Health status monitoring through analysis of behavioral patterns. IEEE Transactions on Systems, Man, and Cybernetics - Part A: Systems and Humans, 5(1):22–27, Jan 2005. ISSN 1083-4427.
- [12] I. Chiuchisan, H. N. Costin, and O. Geman. Adopting the internet of things technologies in health care systems. In 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), pages 532–535, Oct 2014.
- [13] A. Dwivedi, R. K. Bali, M. A. Belsis, R. N. G. Naguib, P. Every, and N. S. Nassar. Towards a practical healthcare information security model for healthcare institutions. In 4th International IEEE
- [14] Pawan Whig and Ajay Rupani," Novel Economical Social Distancing Smart Device for COVID19", International Journal of Electrical Engineering and Technology, 2020,vol 2 no2, pp1-10 (SCOPUS)
- [15] Pawan Whig et. al. 'Analysis of Tomato Leaf Disease Identification Techniques Journal of Computer Science and Engineering (JCSE) Vol. 2,Issue 2 2021 pp.98-103.
- [16] Pawan Whig et. al," IoT Based Novel Smart Blind Guidance System Journal of Computer Science and Engineering (JCSE), Vol. 2, Issue 2 2021, 80-88
- [17] Pawan Whig et. al Improved Pattern of Adaptive Rood-Pattern Search Algorithm for Motion Estimation in Video Compression, Innovations in Cyber Physical Systems, springer 2021,441-448. (Scopus)
- [18] Pawan Whig et. al, 'Impact of Covid Vaccination on the Globe using data analytics. International Journal of Sustainable Development in Computing Science Vol. 3, Jssue.2, 2021
- [19] Momen, Mohammad Abdul. "FPGA-Based Acceleration of Expectation Maximization Algorithm using High Level Synthesis." MASc Thesis, University of Windsor, 2017.
- [20] Yixing Li, Zichuan Liu, Kai Xu, Hao Yu, and Fengbo Ren. 2018. A GPU Outperforming FPGA Accelerator Architecture for Binary Convolutional Neural Networks. J. Emerg. Technol. Comput. Syst. 14, 2, Article 18 (July 2018), 16 pages. DOI: https://doi.org/10.1145/3154839.
- [21] Kaiyuan Guo, Shulin Zeng, Jincheng Yu, Yu Wang, and Huazhong Yang. 2019. [DL] A Survey of FPGA-based Neural Network Inference Accelerators. ACM Trans. Reconfigurable Technol. Syst. 12, 1, Article 2 (March 2019), 26 pages. DOI: https://doi.org/10.1145/3289185.
- [22] Pawan Whig and S. N. Ahmad, On the Performance of ISFET-based Device for Water Quality Monitoring. Int'l J. of Communications, Network and System Sciences (IJCNS) (Nov 2011) ISSN (ONLINE): 1913-3715, ISSN (PRINT):1913-3723, Vol 4 pp: 709-719.
- [23] Pawan Whig and S. N. Ahmad, DVCC based Readout Circuitry for Water Quality Monitoring System, International Journal of Computer Applications (IJCA) ISBN : 973-93-80869-71-6, Volume 49 pp: 1-7.
- [24] Pawan Whig and S. N. Ahmad, A CMOS Integrated CC-ISFET Device for Water Quality Monitoring, International Journal of Computer Science Issues, Volume 9, Issue 4, July 2012, ISSN (online): 1694-0814 pp: 365-371.
- [25] Pawan Whig and S. N. Ahmad, Performance Analysis of Various Readout Circuits for Monitoring Quality of Water Using Analog Integrated Circuits, International Journal of Intelligent Systems and Applications (IJISA) ISSN: 2074-904X (Print), ISSN: 2074-9058 (Online) Volume 4, No.11, October 2012 pp:91-98.