IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 15, May 2023

Review on Health Monitoring System Through IoT

Sushant Ghatolkar¹, Dikshant Khobragade², Shubham Sontakke³, Sameen Khan⁴, Gunwant Mundhe⁵, Prof. Sharda Dabhekar⁶

^{1,2,3,4,5}Student, Rajiv Gandhi College of Engineering, Research & Technology, Chandrapur, Maharashtra, India ⁶Professor, Rajiv Gandhi College of Engineering, Research & Technology, Chandrapur, Maharashtra, India

Abstract:In the current healthcare environment, there is a growing need for advanced technologies to address the issue of unexpected deaths caused by heart problems and attacks, particularly among elderly individuals. This problem arises due to the lack of timely medical intervention and monitoring. To overcome this challenge, we propose an innovative design called Patient Health Monitoring, which utilizes sensor technology and internet connectivity to communicate vital information to healthcare providers and family members. The system incorporates temperature and motion sensors that are connected to an Arduino Uno microcontroller. The microcontroller is then linked to a television display and a Wi-Fi connection, enabling the transmission of data to a web server (wireless seeing knot). By utilizing this system, we aim to prevent unforeseen deaths by providing real-time health monitoring for patients. The temperature and motion sensors detect any abnormalities, such as a sudden rise in body temperature or lack of movement, which could indicate a potential health issue. This information is then relayed to healthcare providers and loved ones through the internet, ensuring prompt medical attention can be provided when necessary. In summary, our proposed design leverages wireless technology, sensor devices, and internet connectivity to improve patient monitoring and reduce the incidence of unexpected deaths caused by heart problems. By implementing this system, we can enhance medical care for elderly individuals and ensure timely intervention in critical situations.

REFERENCES

- [1] Naik, N. (2017). Choice of effective messaging protocols for IoT systems: MQTT, CoAP, AMQP and HTTP. 2017 IEEE International Systems Engineering Symposium(ISSE). DOI:10.1109/syseng.2017.8088251.
- [2] Gezer, V., et al. (2018). "An introduction to edge computing and a real-time capable server architecture." Int. J. Adv. Intell. System (IARIA) 11(7): 105-114.
- [3] Hayes, B. (2008). "Cloud computing." Communications of the ACM 51(7): 9-11.
- [4] Hou, X., et al. (2016). "Vehicular fog computing: A viewpoint of vehicles as the infrastructures." IEEE Transactions on Vehicular Technology 65(6): 3860-3873.
- [5] JoSEP, A. D., et al. (2010). "A view of cloud computing." Communications of the ACM 53(4).
- [6] Knorr, E. and G. Gruman (2008). "What cloud computing really means." InfoWorld 7: 20-20.
- [7] Mell, P. and T. Grance (2011). "The NIST definition of cloud computing." 67
- [8] Rahmani, A. M., et al. (2018). "Exploiting smart e-Health gateways at the edge of healthcare Internet-of-Things: A fog computing approach." Future Generation Computer Systems 78: 641-658.
- [9] Rausch, T., et al. (2018). Emma: Distributed qos-aware mqtt middleware for edge computing applications. 2018 IEEE International Conference on Cloud Engineering (IC2E), IEEE.
- [10] Shi, W., et al. (2016). "Edge computing: Vision and challenges." IEEE Internet of Things Journal 3(5): 637-646.

DOI: 10.48175/IJARSCT-10881

[11] Tao, F., et al. (2014). "CCIoT-CMfg: cloud computing and internet of things-based cloud manufacturing service system." IEEE Transactions on IndustrialInformatics 10(2): 1435-1442.

