

Development of Remote Health Monitoring System for Patients using IoT

K. Tejasree¹, G. Srinivas², M. Srilekha³, G. Sujitha Sri⁴, M. Bala Murali Krishna⁵, Dr. G. Reshma⁶

B.Tech Students, Department of Information Technology^{1,2,3,4,5}

Assistant Professor, Department of Information Technology⁶

Prasad V Potluri Siddhartha Institute of Technology, Vijayawada, Andhra Pradesh, India

Abstract: According to the constitutions of the World Health Organization (WHO), the highest attainable standard of health is a fundamental right for an individual. As we are truly inspired by this, we attempt to propose an innovative system that puts forward a smart patient health tracking system. This paper extends the author's previous works by instantiating the Reference Architecture for IoT-based. Healthcare Applications (RAH) for healthcare applications for the context of the COVID-19 outbreak. We show how wearable and unobtrusive sensors can be integrated into the proposed platform and used to collect and process patient data to promote rapid clinical interventions while preventing contagion between clinical staff and infected patients. Finally, we report the results from a real experience, which used our approach to develop and deploy a system used by the intensive care unit (ICU) for COVID-19 patients in Brazil. Therefore, this paper aims to extend the platform proposed in, initially designed for patients' de-hospitalization, by including wearable and unobtrusive sensors to monitor patients with coronavirus disease.

Keywords: Health Monitoring

REFERENCES

- [1]. S. Jaiswal, R. Katake, B. Kute, S. Ranjane, and P. D. Mehetre, "Survey of Health Monitoring Management Using Internet of Things (IOT)," Int. J. Sci. Res., vol. 5, no. 11, pp. 2243–2246, 2017.
- [2]. S. Jayapradha; P.M Durai Raj Vincent. An IOT based Human healthcare system using Arduino Uno board. Associate Professor, SITE, VIT University, Vellore, Tamil Nadu.
- [3]. Pratiksha W. Digarse; Sanjaykumar L. Patil,"Arduino UNO and GSM based wireless health monitoring system for patients", IEEE, Madurai, India, 11 January 2018
- [4]. Anirvin Sharma; Tanupriya Choudhury; Praveen Kumar,"Health Monitoring & Management using IoT devices in a Cloud Based Framework" of IEEE Conference, Paris, France, 2018
- [5]. D. Shiva Rama Krishnan; Subhash Chand Gupta; Tanupriya Choudhury,"An IoT based Patient Health Monitoring System", IEEE, Paris, France, 2018
- [6]. Yogesh Pandurang Pardhi1 , Prof.Shubhangi Borkar2 PG Student [M.E. (ESC)], Dept. of CSE, N.I.T.Nagpur, "A Survey on Patient's Health Monitoring System in Real Time", IJAREEIE, Vol. 6, Issue 6, June 2017.