

Remote Patient Health Monitoring System Using AD8232 ECG Sensor and Ubidots IoT Platform

Tushar Ghongade¹, Nagesh Rokade², Ms. Walunj K.B³

Samarth Institute of Pharmacy, Belhe, Junnar¹²

Department of Pharmacology³

tusharghongade07@gmail.com

Abstract: *With the rise of remote healthcare, especially for people dealing with heart issues, there's a growing need for simple and affordable ways to monitor heart activity from home. This paper introduces a low-cost system that uses the AD8232 ECG sensor to track a person's heart signals. The sensor connects to a microcontroller, which collects the ECG data and sends it to the Ubidots IoT platform over Wi-Fi. This setup makes it easy for doctors, caregivers, or even family members to keep an eye on the patient's heart in real-time—from anywhere, at any time. It can help catch early signs of heart problems and reduce the need for frequent hospital visits, which can be especially helpful for elderly patients or people living in remote areas. The system is designed to be simple, easy to use, and reliable. By combining basic ECG monitoring with IoT technology, it provides a practical solution for everyday health monitoring. It's a small step toward making healthcare more accessible, efficient, and patient-friendly, especially for those who need regular heart check-ups but want the comfort of staying at home.*

Keywords: ECG, Remote Patient Monitoring, ESP32, AD8232, IoT, GSM, Android Application

