

Chapter GSM Enabled Patient Monitoring System Using Arduino Application for Cardiac Support

GSM Enabled Patient Monitoring System Using Arduino Application for Cardiac Support

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[Abstract](#)

This paper focuses on designing a system to provide the patients with supplemental oxygen to prevent hypoxia for and covid patient. The decrease of oxygen in the tissues in patients with heart diseases, lung related-diseases and elderly people result in hypoxia. During this covid-pandemic, number of the patient died due to poor monitor system and mainly due to insufficient of the oxygen. The main goal of this article is to develop a system to deliver oxygen supplement automatically to patients when required. This system is portable, does not prevent the patients from their life style and gives freedom of mobility for patient.

This device can be used both in hospitals and also in houses for patients with not so critical condition to be monitored. The system is designed to read the heart rate in the body using a heartbeat sensor. As the heart-rate decreases eventually the SpO2 levels in the organs start diminishing thus leading to hypoxia.

Here the author has used a solenoid valve using a relay to regulate the required oxygen supply automatically. It also has a temperature sensor to record the body temperature. The system uses a portable light-weighted oxygen cylinder to deliver the oxygen via nose. The system uses LCD device to

record. This system also uses GSM to communicate with others in case of emergency. The system is provided with a buzzer to intimate the patient in case of emergency. Keywordshypoxiasupplement oxygenhearttrate sensorSpO2levelGSM

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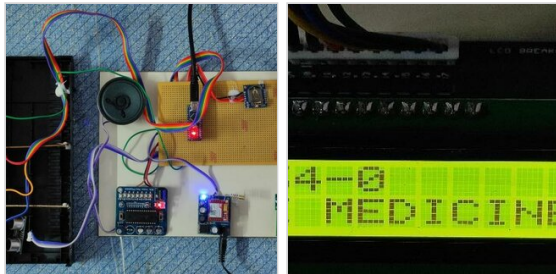
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As in our day-to-day life, every one of us are affecting with some Infectious Disease. Human body temperature is of great interest in medical practice and diagnosis. The normal human body temperature range is usually between 36.5 °C and 37.5 °C (97.7 °F-99.5 °F). A person's body temperature depends o...

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