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**ABSTRACT**

Internet of Things (IoT) is a computing

process, where each physical object is equipped with

sensors, microcontrollers and transceivers for empowering

communication and is built with suitable protocol stacks which

help them interacting with each other and communicating

with the users. In IoT based healthcare, diverse distributed

devices aggregate, analyse and communicate real time medical

information to the cloud, thus making it possible to collect,

store and analyse the large amount of data in several new

forms and activate context based alarms. This novel information

acquisition paradigm allows continuous and ubiquitous medical

information access from any connected device over the Internet.

As each one of the devices used in IoT are limited in battery

power, it is optimal to minimise the power consumption to

enhance the life of the healthcare system. This work explains

the implementation of an IoT based In-hospital healthcare

system using ZigBee mesh protocol. The healthcare system

implementation can periodically monitor the physiological

parameters of the In-hospital patients. Thus, IoT empowered

devices simultaneously enhance the quality of care with regular

monitoring and reduce the cost of care and actively engage in

data collection and analysis of the same.

Internet of Things (IoT) is a computing process, where each physical object is equipped with sensors, microcontrollers and transceivers for empowering communication and is built with suitable protocol stacks which help them interacting with each other and communicating with the users. In IoT based diverse distributed devices aggregate, analyse and communicate real time information to the cloud, thus making it possible to collect, store and analyse the large amount of data in several new forms and activate context based alarms.

Thousands lose their valuable life in vehicle accidents everyday due to the traffic, road condition and speed. By using GPS antenna and latest technological concept of IoT , accident can be immediately reported, reduced and human life can be saved, by connecting different kinds of sensors to different parts or position of vehicle. Inturn by making these sensors to communicate with the hospital or ambulance immediate treatment can be given to the injured person during accident. In the paper, they have designed and implemented by connecting to different sensors to vehicle, which notifies the registered members whenever accident takes place. Using the GPS exact geographic location will be sent to registered user. In this proposed system tilt sensor is used to detect the accident caused due to tilting, vibration sensor to detects the accident if there is a hard vibration of vehicle due to road condition and IR sensor is used for notifying if vehicle is too close to some other vehicle or obstacles.

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