



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering & Research
(Approved by AICTE & Govt. of Maharashtra, Affiliated to Savitribai Phule
Pune University)
Savitribai Phule Pune University Identification No. PU/PN/Engg. /441/2012
Estd: 2012 College Code:6794



Department Of Information Technology

2022-23 Semester 1

BE Project Synopsis

Group Id: 16

❖ **Project Title:**

AUTOMATED PARALYSIS PATIENT HEALTHCARE MONITORING
SYSTEM USING IOT

❖ **Internal Guide:** Prof. A. N. Kalal

❖ **Domain of the Project:** Internet of Things (IoT)

❖ **Problem Statement:**

In today's social Health Insurance structure where patients stay at home after Operations they are not possible monitored 24-hours by a medical caretaker or a family member so. Many people now a days who work full time are facing a problem of monitoring especially old age patient's. So to overcome this problem we are using this patient health monitoring system using IOT.

❖ **Abstract**

This Uses sensor technology with micro-controller and Wi-Fi module to help the user monitor. These people in most cases are not able to convey their needs as they are neither able to speak properly nor do they convey through sign language due to loss in motor control by their brain.

This system also takes care of the situation wherein no one is present to attend the patient and thus sending a message through GSM of what he wants to convey in SMS. It then passes on this data to the microcontroller. The microcontroller processes the data and displays the particular message as per input obtained. The microcontroller now displays the associated message on the LCD screen. It also sounds a Speaker along with message as soon as it receives motion signal. If there was no one to attend to the message displayed on the LCD.

Keyword: Pulse Rate Sensor, Microcontroller, Transformer, GSM Model, Lm 35 sensor, Flux sensor.



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❖ Goals and Objectives

➤ Goals

1. Where we see a problem with these types of devices that are being developed is that they are very large and expensive machines, They seem to be only available in hospitals and not able to be used at the patient's home or at their convenience.
2. Our goal is to make a device that will help the patient fully monitoring stay at home after operation and able to restrain a patient's motion but have them be able.

➤ Objectives

1. Because of expanding work cost, medical institutions would constrain to decrease nursing staff for patients. Our project aims to develop new innovation for the use of basic nursing care. It helps us to take care of patient health care without nurse.
2. This system also takes care of the situation wherein no one is present to attend the patient and thus sending a message through GSM of what he wants to convey in SMS and also sound a speaker along with message.

❖ System Specification

Hardware:

- System : Pentium IV 2 GHz
- Hard Disk : 250 GB
- Ram : 3GB
- Device : HRM device.

Software:

- Operating System : Windows/Linux
- Technology : Java and J2EE
- IDE : My Eclipse, net bean
- Database : My SQL
- Java Version : J2SDK1.5 and above



❖ Proposed System (System Architecture)

- Paralysis is the inability to move muscles on your own and with purpose. It can be temporary or permanent. The most common causes are stroke, spinal cord injury, and multiple sclerosis.
- Paralysis can be a complete loss of movement known as plebian, or a significant weakness called paresis. Even though, there are innovative approaches for curing or treating paralysis patients, but the aim of treatment is to help a person adapt to life with paralysis by making them as independent as possible.
- Where we see a problem with these types of devices that are being developed is that they are very large and expensive machines. They seem to be only available in hospitals and not able to be used at the patient's home or at their convenience.
- Our goal is to make a device that will be able to retrain a patient's motion but have them be able to use the device themselves and have it been cheap enough for them to afford without much debt.

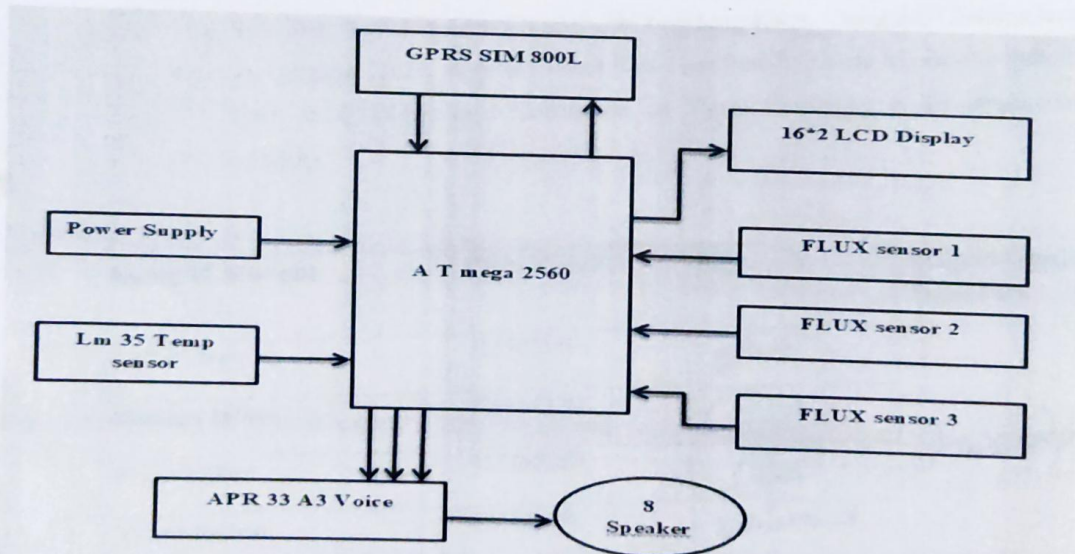


Fig. Architecture of Smart Helmet IOT System Design



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