### IoT BASED PATIENT HEALTH MONITORING USING ESP8266

A project report submitted in partial fulfillment of the requirements

For the award of the degree of

# BACHELOR OF TECHNOLOGY IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

B. ADITYA VENKATESWARA RAO (19815A0205)

A.SAI KUMAR (19815A0201)

K. VEERA SAI (19815A0217)

M.LOKESH (19815A0223) M.BHARGAVA (19815A0224)

Under the Esteemed Guidance of

Mr. S RISHIKESH

**Assistant Professor** 



## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Permanently Affiliated to Jawaharlal Nehru Technological University, Kakinada, AP)
(An NAAC Accredited Institution)

Tamaram, Narsipatnam, Visakhapatnam-531116

### **AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Permanently Affiliated to Jawaharlal Nehru Technological University, Kakinada, AP)

(An NAAC Accredited Institution)

Tamaram, Narsipatnam, Visakhapatnam-531113

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



### **CERTIFICATE**

This is to certify that the project report entitled "IoT BASED PATIENT HEALTH MONITORING SYSTEM USING ESP8266" is a bonafide work submitted by A.SAI KUMAR, B.ADITYA VENKATESWARA RAO, K.VEERA SAI, M.LOKESH,M. BHARGAVA, in partial fulfillment of the requirements for the award of degree of

# BACHELOR OF TECHNOLOGY IN ELECTRICAL & ELECTRONICS ENGINEERING

### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, KAKINADA

During the academic year

2021-2022

Internal Guide's Mr. S Rishikesh

Assistant, Professor
Dept. of Electrical & Electronics Engg.
Avanthi Institute of Engg. & Tech.,
Narsipatnam.

Dr.T. SRINIVAS RAO

**Professor & HOD** 

Dept. of Electrical & Electronics Engg. Avanthi Institute of Engg. & Tech. Narsipatnam.

#### **ABSTRACT**

Technology plays the foremost role in healthcare not only for sensory devices but also in communication and recording. It is vital to observe varied medical parameters and post operational days. So the most recent development in healthcare communication methodology, IoT is customized. IoT is a catalyst for the healthcare and plays distinguished role in many applications. In this project, microcontroller is used as a gateway for communication. This system puts forward a wise patient health monitoring system that uses sensors to trace patient health and uses internet to intimate their loved ones or concerned doctors in case of any emergency. The sensors are connected to a microcontroller to trace the status of the patient which in turn is interfaced with LCD display furthermore as wireless local area network association so as to transmit alerts. If the system detects any changes in patient pulse rate or BP, the system automatically sends an alert to the doctor regarding the patient status over IoT and additionally shows the details of heartbeat, BP and temperature of patient, live over the cloud. So IoT based patient health monitoring system effectively uses internet to watch patient health status and save lives on time. For this reason, fast conditional medication may be simply done by this technique. This system is easy to setup and is capable of high performance and time to time response.