

# SMART IRRIGATION SYSTEM USING INTERNET OF THINGS

*A project report submitted in partial fulfillment of the requirements for the award  
of the Degree of*

**BACHELOR OF TECHNOLOGY**

In

**COMPUTER SCIENCE AND ENGINEERING**

Submitted by;

**D.SAI BUTCHI RAJU**

Regd. No.15811A0519

**K.BHAVYA SINDHU**

Regd. No.15811A0536

**B.DINESH**

Regd.No.15811A0504

**J.KEERTHI**

Regd.No.15811A0531

**A.KARTHIK**

Redg.No.15811A0502

Under the guidance of

**Mr V S RAM PRASAD M.TECH**

*Assistant professor*

*Department of Computer Science and Engineering*



**AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

(Approved by AICTE, New Delhi & Permanently affiliated to JNTU

Kakinada)(Accredited by NAAC, UGC & NBA, AICTE)

**MAKAVARAPALEM, NARSIPATNAM,**

**VISAKHAPATNAM DIST**

**(2015-2019)**

**AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

(Approved by AICTE, New Delhi & Permanently affiliated to JNTU Kakinada)

(Accredited by NAAC, UGC & NBA, AICTE)

MAKAVARAPALEM, NARSIPATNAM,

VISAKHAPATNAM-531113



**CERTIFICATE**

This is to certify that the project entitled "SMART IRRIGATION SYSTEM USING INTERNET OF THINGS" in partial fulfillment for the of degree of Bachelor of Technology in COMPUTER SCIENCE AND ENGINEERING, at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an bonafied work carried out by D.SAI BUTCHI RAJU (15811A0519), K.BHAVYA SINDHU(15811A0536), J.KEERTHI(15811A0531), B.DINESH (15811A0504), A.KARTHIK(15811A0502) under the guidance and supervision during 2018-2019.

Project Guide

Head of the Department

External Examiner



## **ABSTRACT**

### **SMART IRRIGATION SYSTEM:**

Smart Irrigation System is used for controlling the watering or irrigation of plants automatically where the need of human intervention can be reduced. This mainly focused on wastage of water, which is a major concern of modern era. It also saves the time and cost, effectiveness and efficient irrigation service. Arduino uno platform is used to implement the control unit. The setup uses soil moisture sensors which measure the exact moisture level in soil. The value enables the system to use appropriate quantity of water which avoids over/under irrigation. Motor will be turned on/off according to the values sensed by the sensor and the farmer will receive the notification(message). This message is sent by using a web-service called NEXMO SMS SERVICE.