Soil Moisture Monitoring System using Wireless Sensor Network

A Socially Relevant 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

N.JAGADEESH
(20815A0224)

V.J.PRAKASH
(20815A0236)

B.RAM PRASAD
(20815A0240)

C.P.REVANTH
(20815A0208)

S.SAIRAM
(20815A0231)

Under the Esteemed Guidance of

MR. K. DURGA RAO

Assistant Professor

DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

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

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE

This is certify that the socially relevant project report entitled "SOIL MONITORING SYSTEM USING WIRELESS SENSOR NETWORK" is a bonafide work submitted by N.JAGADEESH , B. RAM PRASD , V.J. PRAKASH , S. SAIRAM AND C.P. REVANTH in partial fulfillment of the requirements for the award of degree of

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Internal Guide

MR. K.DURGA RAO

Assistant. Professor

Dept. of Electrical & Electronics Engg.

Narsipatnam.

Dr. T Srinivasa Rao

Professor & HOD

Dept. of Electrical & Electronics Engg.

Avanthi Institute of Engg. & Tech,

Narsipatnam.

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ABSTRACT

Monitoring the soil moisture generally done by manual observation of researchers in agricult ure area. It is obviously take a long time, especially when monitoring the declining level of soil moistur. This practice is less efficient especially when examinin g the level of soil moisture contained plants in it. For that we need a solution to impro ve efficiency in terms of use of time and in terms of facilitating the monitoring of soil moisture conditions. Our proposed system to monitor soil moisture uses Libmiurn Waspmote as a microcontrollcr. The process of sending data from the sensor to the Internet network and then to the database server took about I 0-15 seconds. This was
influenced by the process of laking data from the board and also the delay when the sensor connected lo the available network. The results of system **testing showed that the system can work in a way** if **researchers leave the soil with high humidity then researchers want to monitor soil moisture at a certain moisture level, then the** researchers simply set the level of humidity that wants to be maintained by the application sys tem. If the soil moisture conten t is equal or less than the point set on the system. the system provided notification immediate!y.