

**A Mini Project (EPICS) Report on
Smart Agriculture Monitoring System**

*Submitted in the partial fulfillment of the requirements for the award of the
degree of*

Bachelor of Technology

in

ELECTRONICS AND COMMUNICATION ENGINEERING

by

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**VIGNAN'S INSTITUTE OF INFORMATION TECHNOLOGY
(AUTONOMOUS)**

(Approved by AICTE, Affiliated to JNT University-GV, Vizianagaram)

Beside VSEZ, Duvvada, Vadlapudi Post, Visakhapatnam -530 049 .A.P

2022-23

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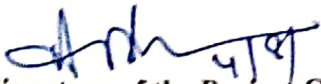



CERTIFICATE

This is to certify that the Mini project (EPICS) entitled **"SMART AGRICULTURE MONITORING SYSTEM"** that is being submitted by

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in the partial fulfillment for the award of Bachelor of Technology in Electronics and Communication Engineering during 2022-23, in Vignan's Institute of Information Technology (A), is a record of bonafide work carried out by them under our guidance and supervision. The results embodied in this work have not been submitted to any other University or Institute for the award of any degree or diploma.


Signature of the Project Guide
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ABSTRACT

The Smart Agriculture Monitoring System (SAMS) is an innovative solution poised to revolutionize traditional farming practices. By seamlessly integrating advanced sensor technology, data analytics, and remote accessibility, SAMS empowers farmers with real-time insights into their fields' conditions. This system employs an array of strategically placed sensors to gather crucial data on soil moisture, temperature, humidity, light intensity, and crop health. Leveraging machine learning algorithms, SAMS processes this data to provide actionable insights, enabling informed decisions regarding irrigation scheduling, pest control, and crop management. The system's web and mobile applications grant farmers the flexibility to monitor and intervene remotely, optimizing resource usage, increasing yield, and fostering sustainable agricultural practices. SAMS represents a pivotal step towards a technologically enhanced and environmentally conscious agricultural future.

In summary, the Smart Agriculture Monitoring System (SAMS) offers a transformative approach to modern farming. Through the amalgamation of sensor technology, data analytics, and remote accessibility, SAMS equips farmers with real-time insights that enhance productivity, reduce resource wastage, and promote sustainable practices. This advancement holds the potential to reshape global agriculture, ensuring efficient food production while mitigating environmental impact.

Keywords: Sensors, Nodemcu ESP8266