

AUTOMATIC IRRIGATION SYSTEM WITH ANDROID APPLICATION

A MINI PROJECT REPORT

Submitted by

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T.J.S. ENGINEERING COLLEGE, PERUVOYAL

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BONAFIDE CERTIFICATE

Certified that this mini project report "AUTOMATIC IRRIGATION SYSTEM WITH ANDROID APPLICATION" is the bonafide work of the following students.

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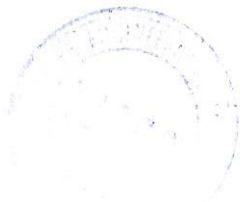
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INTERNAL EXAMINER
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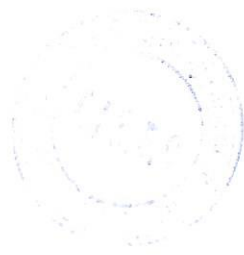

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ABSTRACT

The efficient irrigation management practices based on the monitoring of the moisture in the soil provide a great benefit for the appropriate amount of water applied in the fields. This project presents design and development of a soil moisture sensor and a response monitoring system. The probes used in this sensor are made of nickel which is an anti-corrosive and robust material for use in agricultural related applications. The response monitoring system measure the moisture of the soil, compare it with the desired values given by the user and generate alert if soil moisture goes below desired value. It helps in problems related to growing of crops in which irrigation is required at irregular interval. It is also helpful in monitoring of soil moisture in golf fields. Introduction India is a developing nation with a very large population. Due to increasing population, the basic need such as food and water is increasing day by day. Thus there is a need of saving these resources and utilize them in an efficient manner. Since water is one of the most important elements in our daily life, thus we must use efficient ways to utilize water and save it for future generations. One of method is efficient irrigation management practices for fields. Irrigation water management practices could greatly benefit by the knowledge of moisture in the soil. To determine the soil moisture we have designed and developed a nickel probes based soil moisture sensor and a response monitoring system. By knowing the moisture value, we can estimate when to water and how much to water the fields so that there is no over-watering.



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