

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“Jnana Sangama” Belagavi – 590 010



PROJECT REPORT ON “DESIGN AND IMPLEMENTATION OF REMOTE MONITORING SYSTEM FOR SOLAR MOTORS AND PUMPS”

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

**BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING**

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

MOODBIDRI – 574 225.

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ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

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(Affiliated to VTU, BELAGAVI)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

Certified that the project work entitled "DESIGN AND IMPLEMENTATION OF REMOTE MONITORING SYSTEM FOR SOLAR MOTORS AND PUMPS" is a bona fide work carried out by

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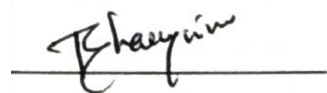
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in partial fulfillment for the award of **BACHELOR OF ENGINEERING** in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2020-2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.



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ABSTRACT

Automation technology has got vital development. The cropland sluice in our motherland still embraces the large physical working manner which will result in wasting water resources and human resources.

Monitoring systems of remote locations have an excessive opportunity today. Presently many remote monitoring systems are designed and developed as per necessities or chunks and application areas. Currently, constraints of remote monitoring systems growing promptly. Open CPU is a prodigious embedded solution for the machine to machine (M2M) technology. The intention of developing a remote monitoring system is mainly focused on the machinery present in construction fields. The remote monitoring system is developed to measure the parameters and monitor the machinery present at the construction field. Construction works are dangerous work because fields may have heavy equipment and machinery. Construction work has many hazardous tasks such as working with heavy equipment and machinery, power tools, dusty environment. This machinery requires high power or electricity to work. The remote monitoring system avoids coincidences that may happen on the construction site. The remote monitoring system is installed once at machinery and the required information of the machine is monitored over the server using GSM technology. It may avoid unexpected accidents or damages happen in the future.

The designed remote monitoring system allows efficient, reliable, and more precise monitoring and measurement of parameters of equipment present at remote places. The system is designed using Embedded C programming language. RMS takes the information through a sensor via ADC such as Voltage, RPM, temperature, and pressure of equipment and sends it to the server. GSM/GPRS technology is used to transmit these parameters over the server.