# “SOLAR TRACKING SYSTEM USING ARDUINO IN P/G MASTER OF COMPUTER APPLICATION”

## A

***Dissertation***

## Submitted

*In partial fulfillment*

*For the award of the Degree of*

***Master of Computer Application***

***In Department of*** *Computer Science* ***Engineering***

# (With specialization in Computer Science)



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**CANDIDATE'S DECLARATION**

I hereby declare that the work, which is being presented in the dissertation, entitled **“**HOTEL MANAGEMENT SYSTEM**”** in partial fulfillment for the award of degree of **“MASTER OF COMPUTER APPLICATION”** in department of **COMPUTER SCIENCE & Engineering** with specialization in **COMPUTER SCIENCE Engineering**, **and submitted to the department of COMPUTER SCIENCE & Engineering, SHRIDHAR UNIVERSITY, PILANI** is a record of my own investigations carried under the Guidance of **“Asst. Prof. Mr. PANKAJ SIR”.**

I have not submitted the matter presented in this Dissertation anywhere for the award of any other Degree.

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### POST GRADUATION (MASTER OF COMPUTER APPLICATION)

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**Certificate**

This is to certify that thesis/Report entitled **“**SOLAR TRACKING SYSTEM IN P/G MASTER OF COMPUTER APPLICATION**”** which is submitted in partial fulfillment of the requirement for the award of degree Post Graduation in MCA Computer Science Engineering to **Shridhar University, Pilani** is a record of the candidate own work carried out by him under my supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree.

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**ABSTRACT**

The genesis of “SOLAR TRACKING SYSTEM USING ARDUINO” project is solar energy become an important and popular renewable energy source. By using a solar tracking system, we can produce an abundance of energy and improve the efficiency of solar panels.

The solar panels efficiency lies in its perpendicular proportionality with the sun’s rays. Although cheaper options are also available, its installation charge is high. A prototype solar panel is discussed in this paper based on the sun’s rays as the reason for its design and construction.

Arduino is used as the main control circuit. As a result of the programming of this devices, the LDR sensor, when it detects sun rays, will provide direction to the Servo Motor in order to move the solar panel.

Consequently, the solar panel is positioned so that it can receive the maximum amount of sunlight.