

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI-

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**A MICRO PROJECT REPORT ON
“Motion Based Automatic Door Opener”**

Submitted By,

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Under the Guidance of

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CERTIFICATE

This is to certify that the Micro-Project entitled "Motion Based Automatic Door Opener" has been Successfully Completed by

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The bonafide students of Department of Basic Sciences, Alva's Institute of Engineering and Technology, affiliated to VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI, during the academic year 2020-2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The report has been approved as it satisfies the academic requirements in respect of Micro-Project work prescribed for Bachelor of Engineering.



Dr. Jayarama A

Mini Project Guide



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ABSTRACT

Our system puts forward an automatic and precise door opening system based on human movement sensing near the door. Well opening a door in places like hotels, Shopping complexes, and offices can be a tedious task and sometimes requires hiring a person just for the sake of opening door whenever a person arrives. Well this project proposes a system that allows for automatic door opening solution by sensing human presence near it. Our system achieves this functionality with the help of PIR sensors. PIR stands for passive infrared sensors. Every live body emits some infrared energy. This energy is sensed by a PIR sensor from a good distance. This signal is then processed and door is opened and closed based on this data. When a living being arrives within the sensor range, it detects its presence and sends out a command that opens the door. The door then automatically closes after a specific time delay if there is no further motion near the door. The system can be later enhanced by integrating counter mechanism so as to keep track of the number of persons inside the facility.