

# **THE WELCOME ROBOT “AVANTHIKA”**

*A project report submitted in partial fulfillment of the requirements  
For the award of the degree of*

## **BACHELOR OF TECHNOLOGY IN ELECTRICAL & ELECTRONICS ENGINEERING**

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**DEPARTMENT OF  
ELECTRICAL AND ELECTRONICS ENGINEERING**

**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**(Permanently Affiliated to Jawaharlal Nehru Technological University, Kakinada, AP)**

**(An NAAC Accredited Institution)**

**Tamaram, Narsipatnam, Visakhapatnam-531116**

**(2021-2022)**

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### CERTIFICATE

This is to certify that the project report entitled "THE WELCOME ROBOT AVANTHIKA" is a bonafide work submitted by G. SURESH, V.L. CHAKRADHAR L. NAVEEN, P.SIVA KUMAR, T. MOHAN MANU in partial fulfillment of the requirements for the award of degree of

### BACHELOR OF TECHNOLOGY IN ELECTRICAL & ELECTRONICS ENGINEERING

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY,  
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## ABSTRACT

This project is aimed to develop a robot to reduce a man power in different works, saving of time to perform a multitasks at same time and to do work in some places where humans can't entered. This robot purpose is which welcomes the people by hand gestures. The entire project is developed by using Arduino. The hand gesture is a traditional way of welcoming the people, when a person enters the room the ultrasonic sensor which is placed in the robot activates the Arduino and it turn into an output which controls the motors placed near the hand structure. The communication with the robot by Arduino is done by the code, embedded c, using open-source Arduino software (IDE). A Bluetooth device is connected to the Arduino Uno to control the movement of the robot. A specific application, Arduino Bluetooth controller, is handled by the user and the user can control the robot by altering the commands in the app. A motor drive is connected to the motor which feeds electricity into it in varying amounts, thereby indirectly controlling the motor speed.