# **OBSTACLE AVOIDING ROBOT CAR**

A Socially Relevant 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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**CERTIFICATE** 

This is certify that the socially relevant project report entitled "OBSTACLE AVOIDING ROBOT CAR" is a bonafide work submitted by CH YOGENDRA PRASAD, K SRINU M VIJAY, M BHOOLAKSHAMI AND M SAI GANESH

in partial fulfillment of the requirements for the award of degreeof

# BACHELOR OF TECHNOLOGY IN ELECTRICAL & ELECTRONICS ENGINEERING

# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, KAKINADA

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#### ABSTRACT

Obstacle detection and avoidance can be considered as the central issue in designing mobile robots. This technology provides the robots with senses which it can use to traverse in unfamiliar environments. Without damaging itself. In this paper an OBSTACLE avoiding Robot is designed which can detect obstacles in its path and maneuver around them without making any collision. It is a robot vehicle that works on Arduino Microcontroller and employs three ultrasonic distance sensors to detect obstacles. The integration of three ultrasonic distance sensors provides higher accuracy in detecting surrounding obstacles. Being a fully autonomous robot, it successfully maneuvered in unknown environments without any collision. The hardware used in this project is widely available and inexpensive which makes a robot easily replicable.

Keywords: Obstacle avoidance, ultrasonic sensor Arduino UNO.