

"INTELLIGENT BRAKING SYSTEM"

**A THESIS SUBMITTED IN THE PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE AWARD FOR THE DEGREE OF**

BACHELOR OF TECHNOLOGY

IN

MECHANICAL ENGINEERING

SUBMITTED BY

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AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

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BONAFIED CERTIFICATE

This is to certify that T.NAGA SAI KIRAN (Regd No. 16811A0383), P.BHASKAR RAO (Regd No. 16811A0362), R.AVINASH (Regd No. 16811A0371), T.SRINU VASU (Regd No. 16811A0384) of final year engineering have done project work on "INTELLIGENT BRAKING SYSTEM" at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, Narsipatnam in partial fulfillment of the requirements for the award of degree of "Bachelor of Technology" in "MECHANICAL ENGINEERING" to JNTUK University, during the academic year 2016-2020.



INTERNAL GUIDE

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ABSTRACT

I.C Engines have been advanced a lot such that its speed is becoming a major catastrophe. Advanced Intelligent braking system improves braking techniques in vehicles. It changes complete braking systems in an automotive and deals with the concept of Intelligent braking system giving the solution. This project is designed with ultrasonic transmitter, ultrasonic receiver, Arduino UNO R3 board with PIC microcontroller, DC gear motor, braking arrangement. The Ultrasonic Sensor generates (0.020-20)KHZ frequency signal. It is transmitted through ultrasonic transmitter. The ultrasonic receiver is used to receive the reflected wave present in front of the vehicle, then the reflected waves is given to the ultrasonic wave generator unit in which the incoming wave is amplified and compared with reference signals to maintain a constant ratio and this signal is given to microcontroller and through which the working of DC gear motor takes place, which results in application of brakes. The prototype has been prepared depicting the technology and tested as per the simulated conditions. In future the actual model may be developed depending on its feasibility.