**Autonomous driving vehicle**

**A PROJECT REPORT**

*Submitted in partial fulfillment for the award of the degree of*

**B.Tech**

in

**Mechanical Engineering**

*by*

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**School of Mechanical Engineering**



MAY-2017

**DECLARATION BY THE CANDIDATE**

We hereby declare that the project report entitled “**Autonomous driving vehicle”** submitted by me to Vellore Institute of Technology University, Vellore in partial fulfillment of the requirement for the award of the degree of **B.Tech** in **Mechanical Engineering** is a record of bonafide project work carried out by me under the supervision of **Kannan C.** I declare that this report represents my concepts written in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I further declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed. Further I affirm that the contents of this report have not been submitted and will not be submitted either in part or in full, for the award of any other degree or diploma and the same is certified.

Place : Vellore Signature of the Candidate(s)

Date:



**School of Mechanical Engineering**

**BONAFIDE CERTIFICATE**

This is to certify that the project report entitled “**Autonomous driving vehicle”** submitted by **G.Krishna Reddy (13BME0100), Peesapati Venkata Naga Anivarth (13BME0406), Kamatham Saideep (13BME0622)** to Vellore Institute of Technology University, Vellore, in partial fulfillment of the requirement for the award of the degree of **B.Tech** in **Mechanical Engineering** is a record of bonafide work carried out by him/her under my guidance. The project fulfills the requirements as per the regulations of this institute and in my opinion meets the necessary standards for submission. The contents of this report have not been submitted and will not be submitted either in part or in full, for the award of any other degree or diploma and the same is certified.

**Project Coordinator Project Supervisor**

**Head of the Department External Examiner**

**ACKNOWLEDGEMENT**

We are thankful to our chancellor **Dr**. **G. Viswanathan.** We are thankful to our vice chancellor **Dr. Anand A. Samuel.** *We are also thankful to* ***Dr.* Arivazhagan *N****, Dean (School of Mechanical Engineering). We are thankful to* ***Prof. DEVENDRANATH RAMKUMAR*** *(HOD mechanical).* We are most grateful to our guide **Prof. KANNAN C** for providing us pearls of wisdom during the course of our project. We are thankful to Robotics lab at VIT for providing us with equipment and machines for our project. We are also grateful to **Prof. Krishna .S** for helping us through the different stages of our final year project.

We have to express our appreciation to Ganesh Electronics vellore, tamil nadu for their support in supply of necessary products for successful completion of our project.

Place : Vellore <Signature of the Student>

**(Name of the Student)**

Date :

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# **Abstract**

An important step in the autonomization of robots specifically designed for mobility is Autonomous navigation the ability to navigate, without the manual control of a human user and crossing obstacles successfully without human help. We present here a navigation bot, Which can move autonomously without any human intervention expect in some special cases. We have achieved this using ultrasonic sensors, arduino, IR sensor, motor driver, arduino programming language, servo motor and dc motor. When the power button is switched on the robot will go straight overcoming the obstacles and when required the bot can be turned using computer with the help of human mind. The whole concept is using human mind to take turns is to make sure that the bot goes in the direction user requires and without much effort of the user.