



**Creation  
Labs**

**AUTONOMOUS  
CAR**



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## OUR WORK TILL NOW

Our team involving mechanical, electrical and computer science enthusiasts worked for a month to build a small and modular bot. The bot has a sturdy chassis which can withstand a payload of upto 12 kgs. It is mounted with the following sensors:

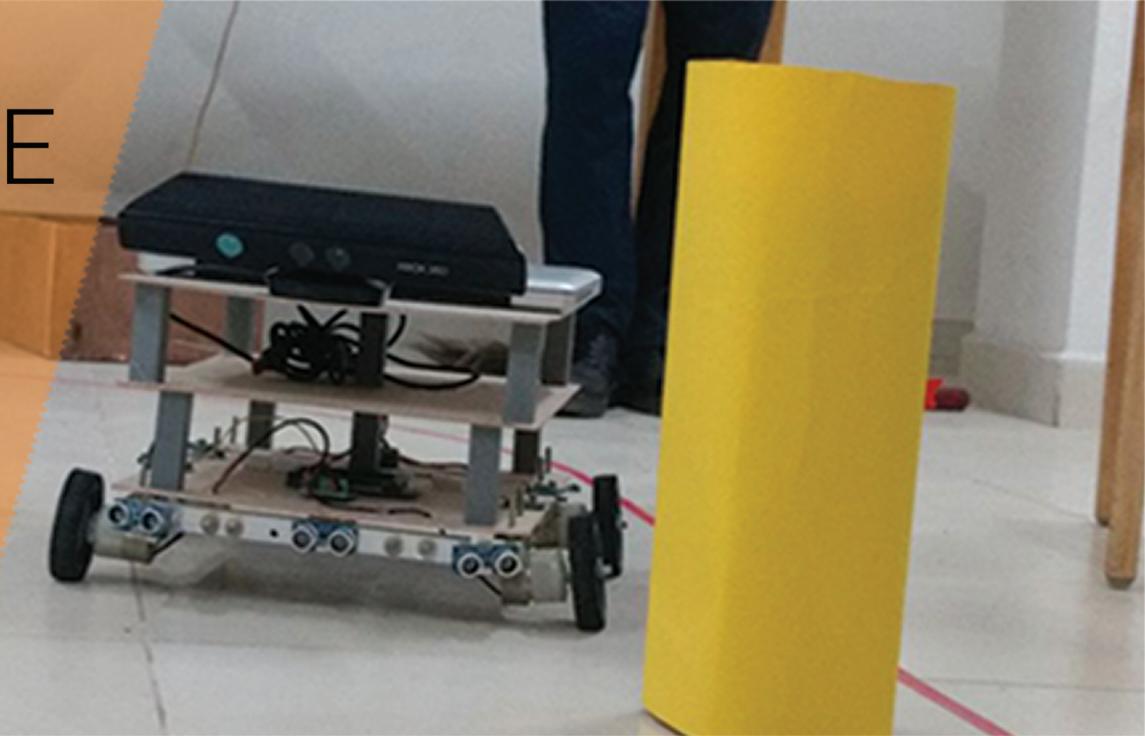
- Kinect Camera.
- Infrared Sensors.
- GPS.
- Ultraviolet Sensors.

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This bot is capable of:

- ✓ Navigating through a track autonomously based on image processing algorithms.
- ✓ Navigating through a set of obstacles and avoiding collisions autonomously.
- ✓ Streaming current physical state and location data to a ground station for continuous monitoring and control.
- ✓ Following a set of GPS waypoints.

# INNOVATE DESIGN CREATE



## OUR VISION

Our ultimate vision is to make a system which can be integrated with any electric ground vehicle to make it autonomous. This system will enable the car to navigate autonomously and effectively dodge road traffic and obstacles.

To meet this vision, we have made the following roadmap:

### FIRST PHASE

Prototype bot-The prototype bot is capable of navigating a path full of obstacles autonomously in an internal controlled environment.

### SECOND PHASE

Intelligent Ground Vehicle Challenge-Next, we aim to build a vehicle that addresses the challenges for the Intelligent Ground Vehicle Challenge. This will act as a stepping stone for the eventual setup for the actual car system.

### THIRD PHASE

The Ultimate system-The ultimate system which can be integrated with an electric ground vehicle and give it autonomous capabilities.

We have completed the Prototype bot as of now, and are planning to start with the vehicle for the Intelligent Ground Vehicle Challenge soon.

# **HOW CAN YOU HELP US?**

We need lots and lots of help! You can help us in the following ways:

- Sponsorship-We would be glad if you could provide us with some monetary support or provide us with components required for the completion of the project.
- Mentorship-We need the guidance of your experts for this project.

We would love to have any other form of help you can provide us.

## **CONTACT US!**

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