

GRADUATION PROJECT

Autonomous Car

Submitted by: Hisham Abdelkader Farid

Mohamed Ashraf Osman

Ziad Ahmed EL Kholy.

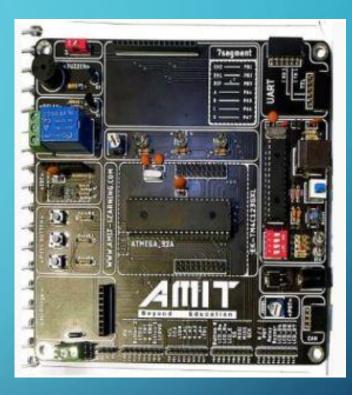
Introduction

- It is a vehicle that have ability of sensing its environment and operating without human involvement.
- It senses using ultrasonics sensor rotating with servo motor in 180 degree range.
- When the sensor send signal to the ATMega 32 chip which says that there is an obstacle. The car stops and ultrasonic start scanning right and left to see where is the more free place to move in it. if the left and right distance is 40 cm or less it moves backward, and check left and right again.
- All this code of scanning is written in the while (1).



- Amit kit
- L293D Chip (motor driver)
- 2 DC motors







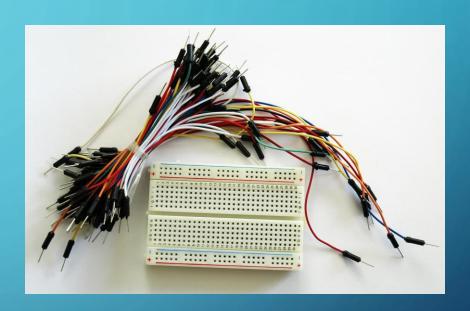
- Caster wheel
- Servo motor
- Ultrasonic sensor







- Breadboard
- jumpers
- Acrylic kit of our design laser cut



- 2 Batteries 3.7 volt
- Battery holder (2 batteries)
- Bolts ,Nuts & Metal angle for fixation

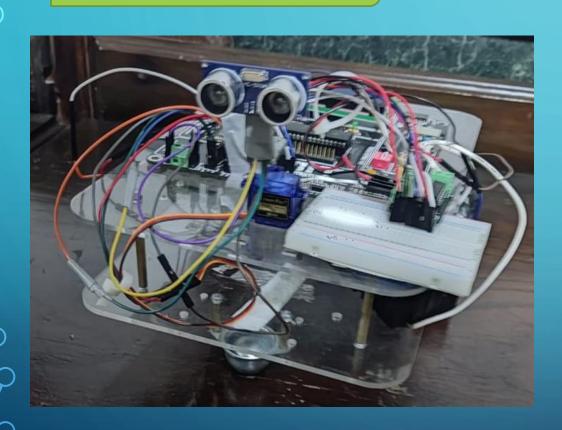








Final Assembly





Source code and test videos

• https://github.com/Gello1/Autonomous-Car