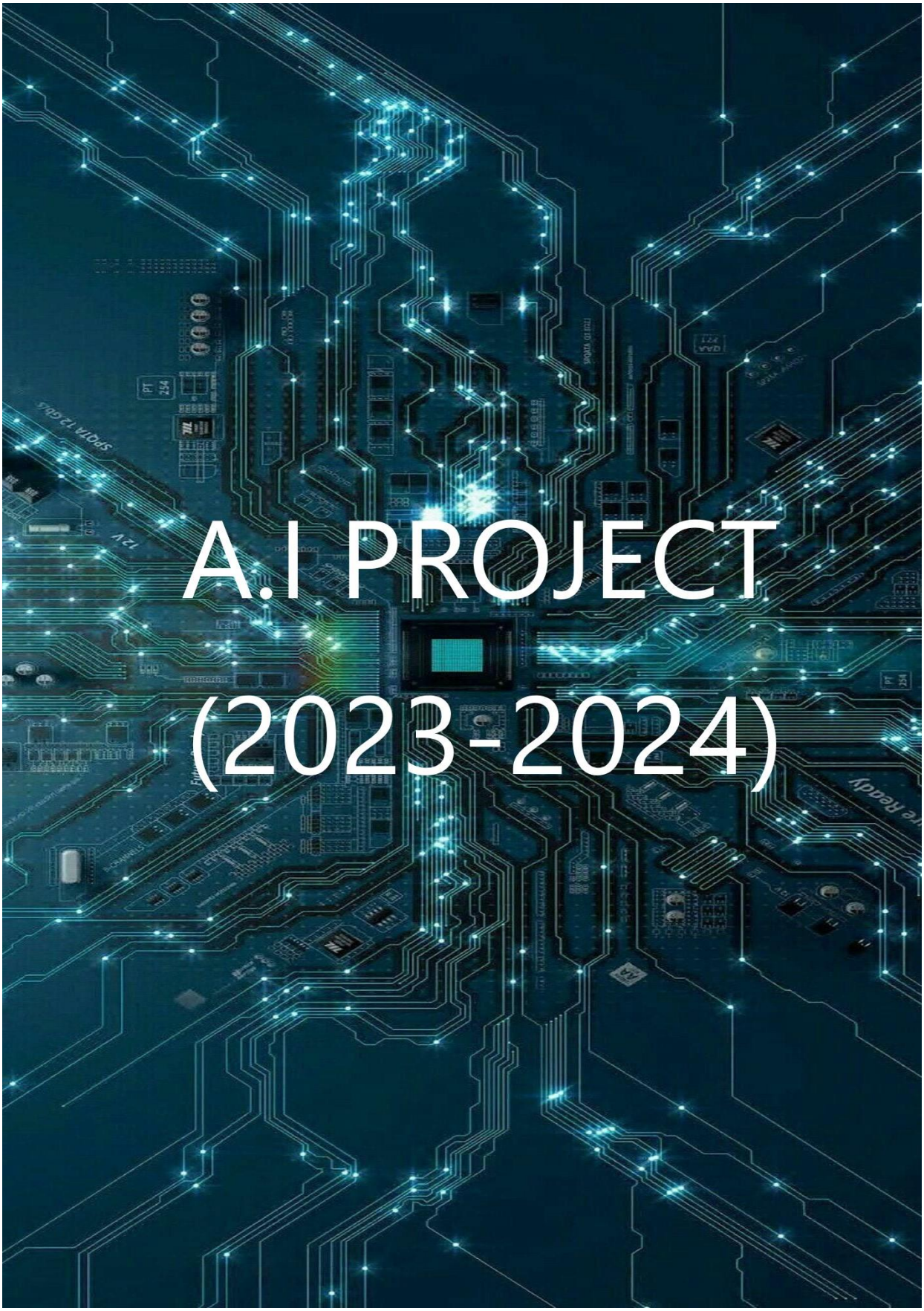

A.I PROJECT
(2023-2024)

# A.I PROJECT (2023-2024)

## INTRODUCTION:

Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Specific applications of AI include expert systems, natural language processing, speech recognition and machine vision.

## DETAILS ABOUT PROJECT:

PROJECT NAME : ASTRO369

SCHOOL : ST.JOHN'S SENIOR SECONDARY SCHOOL

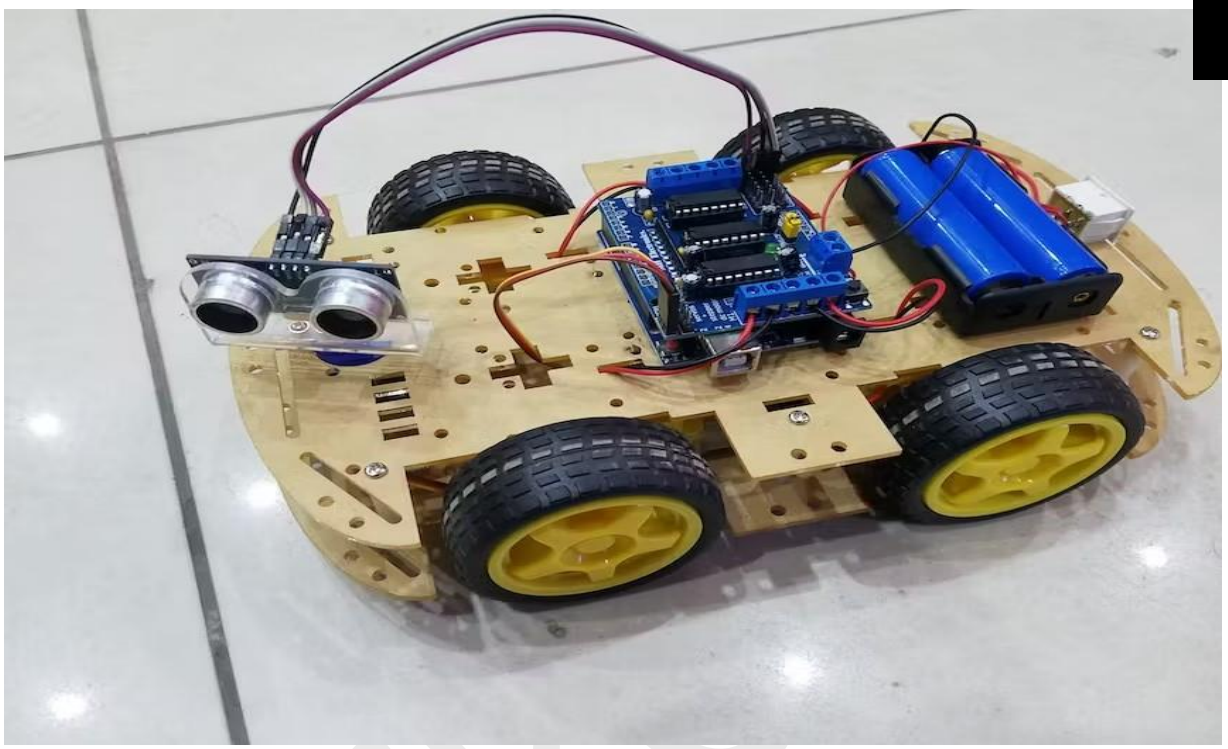
TEACHER : MANOJ KUMAR SIR

DONE BY : MUKESHWAR RAUDRA

CLASS : XI SEC : 'B'

## PURPOSE OF ASTRO369:

The ASTRO369 was actually made for the purpose of avoiding obstacles and it can be controlled by Bluetooth and voice of user these features are built in this bot because in case if a space ship revolves around the earth or when it is crossing asteroid belt of our solar system then that time we can change the mode to obstacle avoidance because we can avoid the meteoroid to attacks the spaceship and we can also control the spaceship from earth by passing signals like Bluetooth and through voice of command Centre also so this was a little bit of starting idea to create a new era in technology and expanded space research these are some of the purpose of ASTRO369



A S T R O

**FUNCTIONS**:

ASTRO369 can be used to detect the objects in the surroundings and also it Sends a signal from ultrasonic sensor and object reflects the signal and then send back to The sensor then it processed by ARDUINO UNO and then passes the information to the Motor shield L293D that motor controls the 4 wheels to move according to the information Given by the arduino then astro369 avoids the object and move on it can also controlled by BT(Bluetooth) using specific app name as [BT RC CAR] when we connect to the car we can Able to perform moves manually operating system and also that it can be controlled by Voice of user for that we need specific app known as [ arduino rc control ] so that these Ideas can be encouraged and make a new era in space research and automobile industry So that these are some functions of ASTRO 369

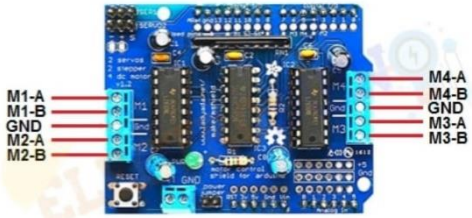
**COMPONENTS** :

- Arduino UNO
- Motor shield L293D
- DC motors
- Servo motor
- Wheels
- Battery
- Battery adapter
- Jumper wires
- Chassis body (plastic)
- Ultrasonic sensor clamp (plastic)
- M3 / 3mm nuts
- Slotted minus M3 (screws)
- Screw driver
- Soldering
- feviquick
- Switch
- Bluetooth module
- USB A-B cable

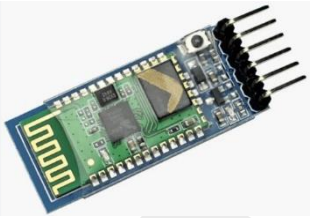
**SOFWARE**:

## COMPONENTS:

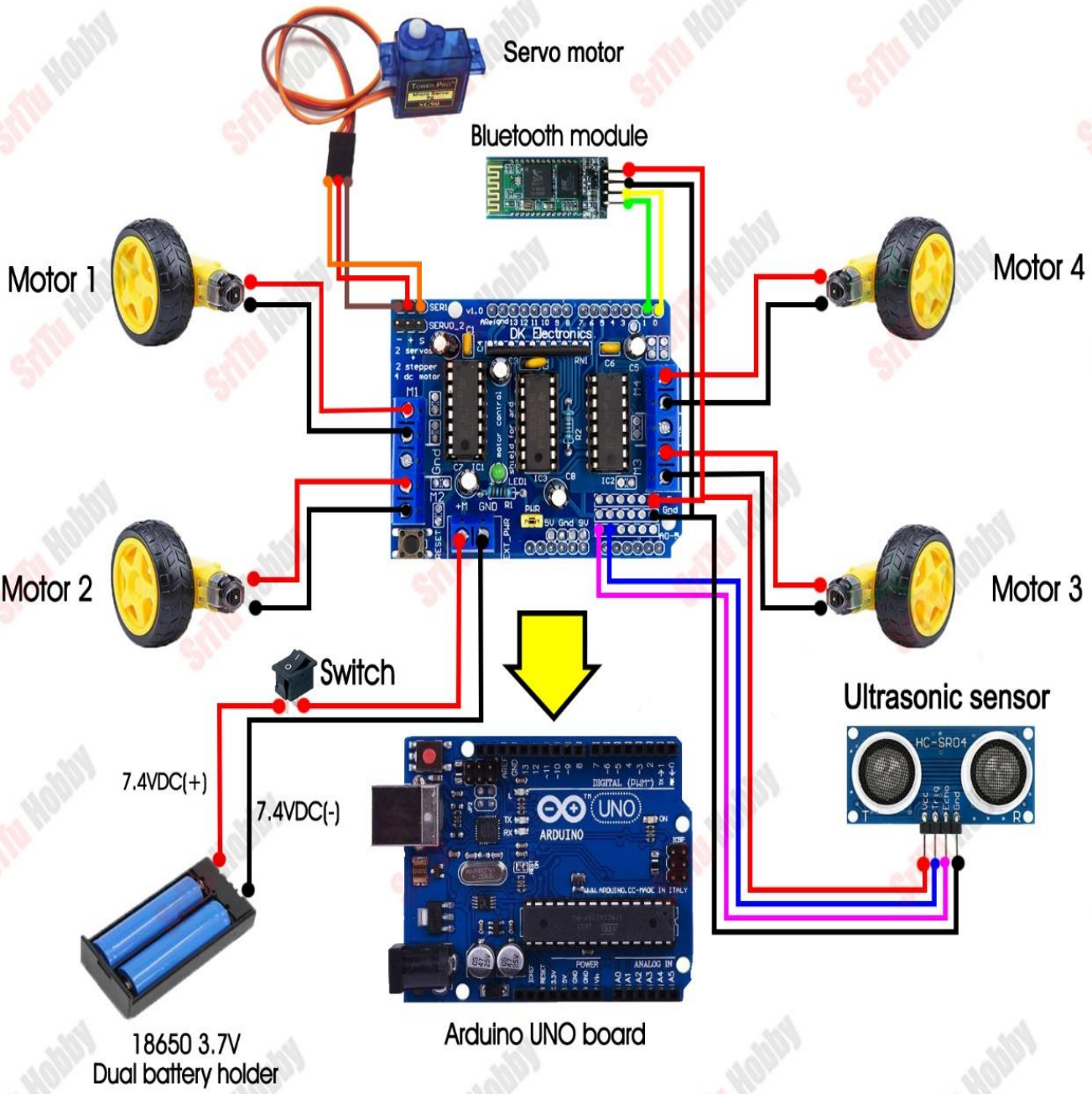
UNO


M1-A
M1-B
GND
M2-A
M2-B
M4-A
M4-B
GND
M3-A
M3-B

HC-SR04
Vcc
Trig
Echo
Gnd
T
R



**CIRCUIT DIAGRAM:**



**SOURCES:**

- 3D model of this project can be refer by scanning → This QR code
- Refered youtube videos are:
    1. https://youtu.be/aE_J7B-O4VQ?si=-9s7UHFCbwNsX1HT for connections and uploading the code process
    2. https://youtu.be/aIJiBayh1To?si=YUv3XFTo82plABs- for assembling the parts

- Apps :
  https://play.google.com/store/apps/details?id=braulio.calle.bluetoothRCcontroller&hl=en_IN&gl=US for controlling ASTRO369 by remote

  https://play.google.com/store/apps/details?id=com.broxcode.arduinobluetoothfree&hl=en&gl=US for controlling ASTRO369 by voice of user

ASTRO369

Thank
You