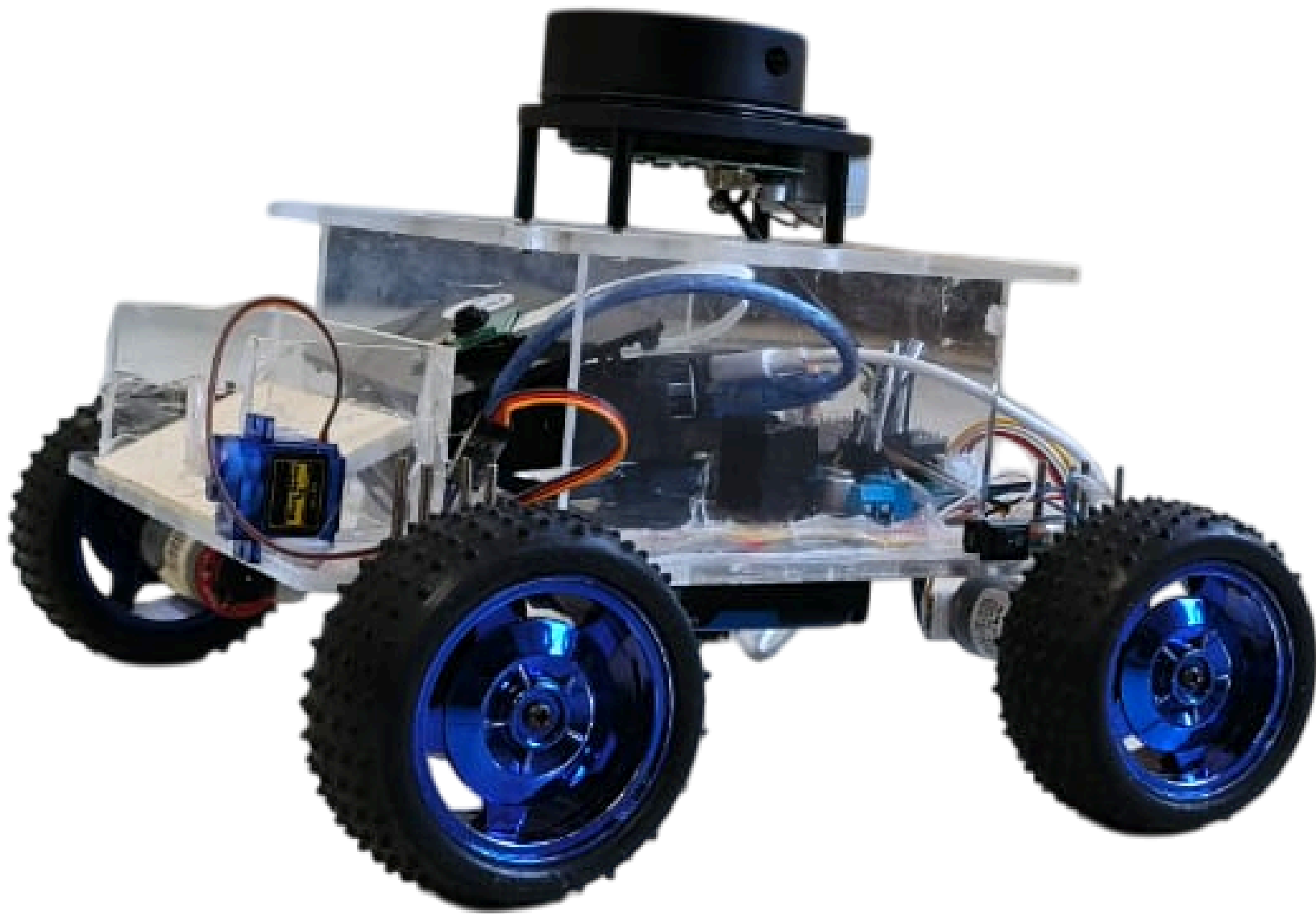


LIMIT BREAKERS

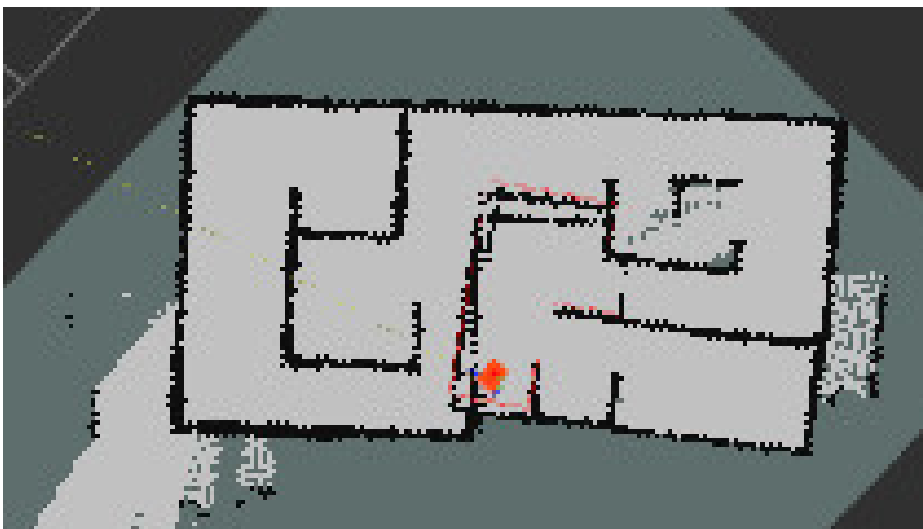
WHERE LIMITS END, POSSIBILITIES BEGIN

TECHNICAL OVERVIEW

- 1.Chasis dimensions : 26*29*20
- 2.Motor controller : Arduini uno
- 3.Microprocessor Microprocessor: Rasberry Pi 4
- 4. Li-ion 18650 3.7V battery power supply
- 5.RP- LiDAR
- 6.Motors : servo & DC gear motor



VISUALIZATION



With RViz, Mapping and navigation data are transformed into 3D visuals, allowing us to see paths, obstacles, and movement in real time

ACHIEVEMENTS

- **Mapping** – Built a system to create and update environmental maps for navigation.
- **Terrain Navigation** – Robot moves reliably across uneven on complex surfaces.
- **Image Detection** – Integrated vision system to identify and classify objects.
- **Object Handling** – Automated loading and offloading of items with precision.

COMPONENTS



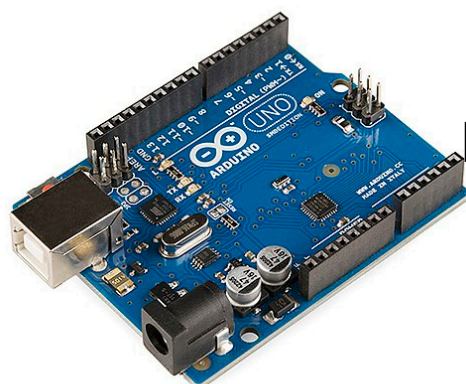
Provides 360° laser scanning for mapping and obstacle detection.



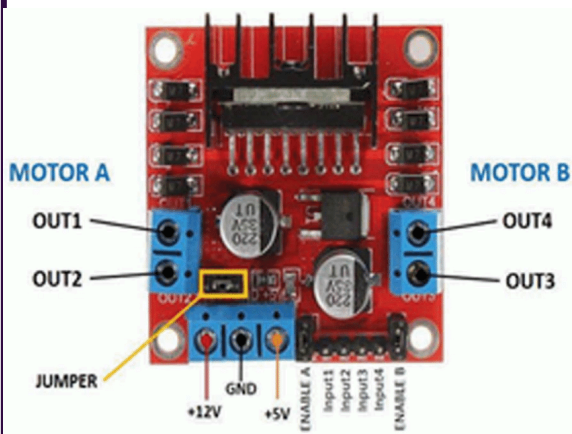
Acts as the brain, running navigation, vision, and decision-making software.



- Enable movement and mobility of the robot.



Handles low-level control of sensors and actuators.

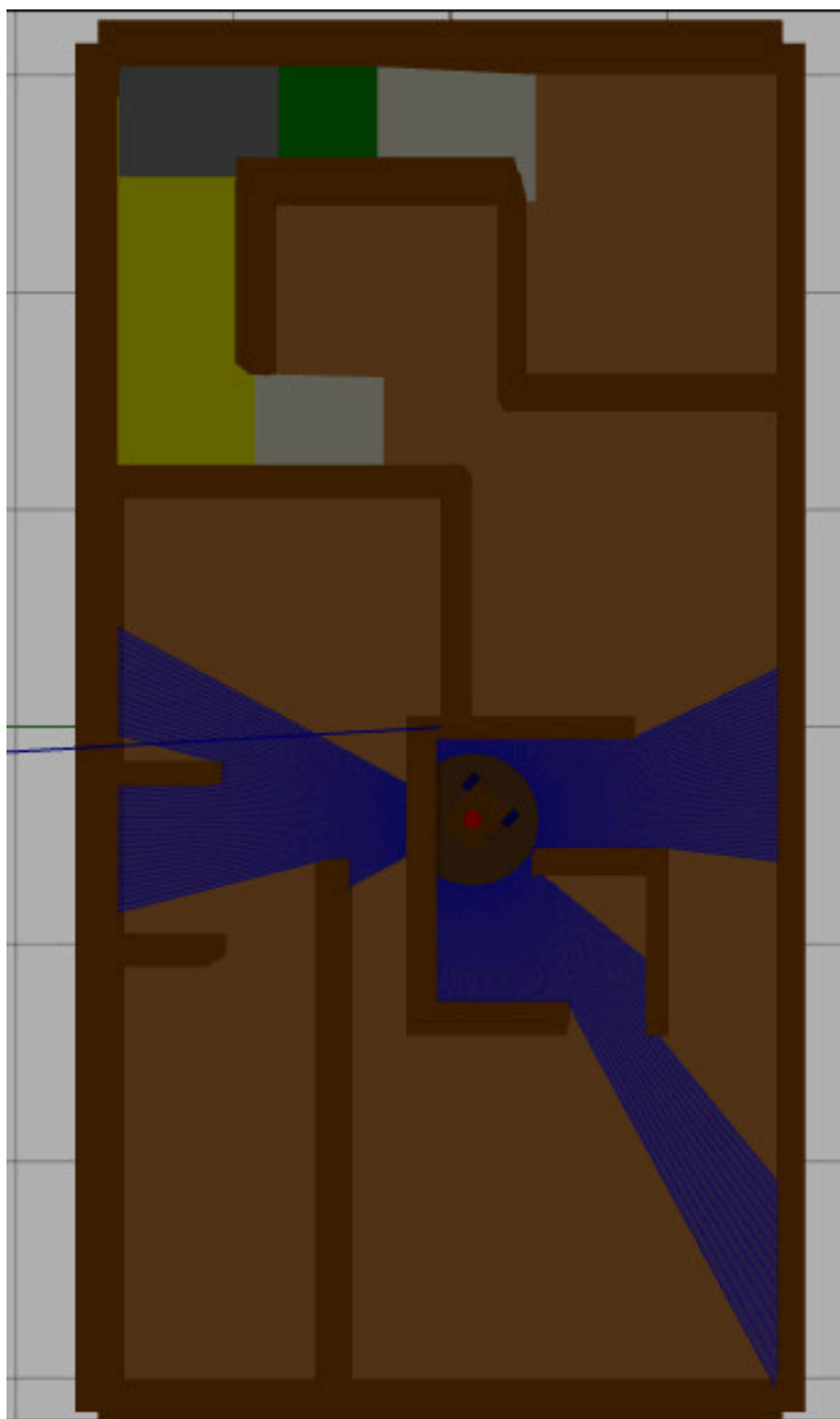


Regulates power flow to motors for speed and direction control.



Provide stability and movement, enabling the robot to traverse different terrains.

A Gazebo simulation of the gamefield



Scan to watch the robot in action 🚀

