

LP for Navigating Mars with a Smart Robotic Car

Problem Statement - 1 (Smart Robotic Mars Rover/Car)

Mars, the red planet, is our next door neighbor in the solar system. Imagine a space adventure where we send a special car to explore Mars. We would be able to explore the environment, the air, and various other aspects of the planet. The car will need to understand and follow our instructions, even though it takes a long time for our messages to reach it.

You need to build a special robotic Mars exploring car, that can drive around Mars, follow your directions, and that can handle the delay in instructions from Earth. This car will be key to discovering cool stuff on Mars, like is there water on the planet, or is there any sign of life?

Your job is to make a special car for exploring Mars. This car should understand our instructions, like when to go forward, backward, left, or right. You also need to figure out a way to talk to the car, creating a language that can be understood across space.

To build this Mars discovering Car, you can use various softwares/tools of your choice, some suggested are:

1. Arduino
2. Arduino IDE
3. Different parts of the Car