

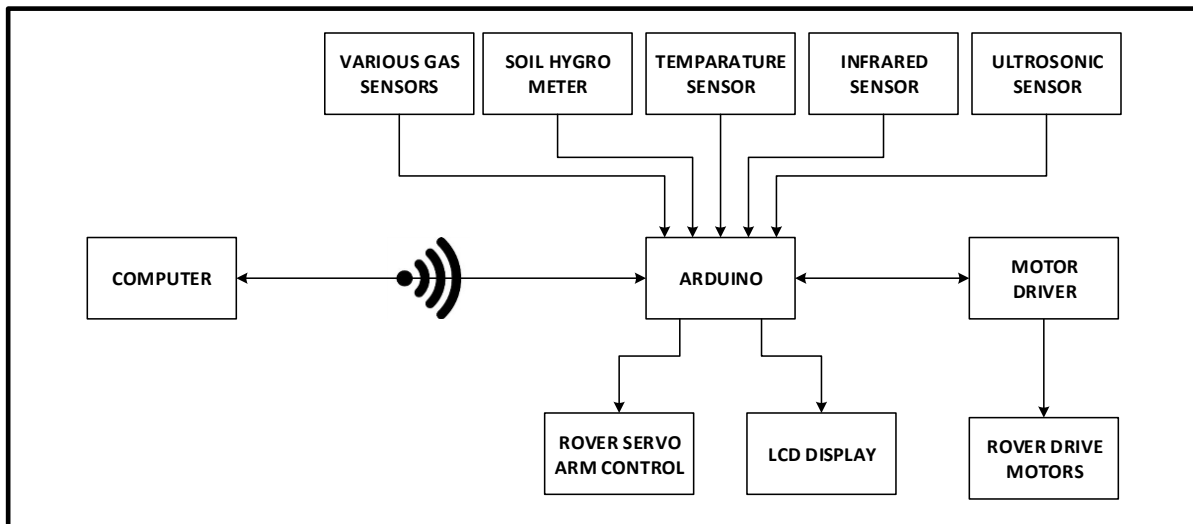


SPACE ROVER

The Space rover is a “proof of concept” project that uses several sensors and electronics to find different elements and compounds in space. The rover uses basic chemistry involving sensors to detect these compounds. This chemistry can be used to explore space in a new way.

This rover is built using Arduino; an open-source computing platform. This robot integrates several sensors such as Hydrogen Sensor, Alcohol Sensor, Methane Sensor, Soil hygrometer, Temperature sensor, Infrared sensor, Ultrasonic sensor etc. It also has an onscreen display to display data from various sensors. The system uses Zigbee protocol (serial communication) to control the robot from your computer application. ZigBee is an open global standard for wireless technology designed to use low-power digital radio signals for personal area networks. ZigBee operates on the IEEE 802.15.4 specification and is used to create networks that require a low data transfer rate, energy efficiency and secure networking.

SPACE ROVER ARCHITECTURE



PROJECT PHOTOS



MODULES / SENSORS

MQ Gas Sensors (MQ-03, MQ-04, MQ-08)



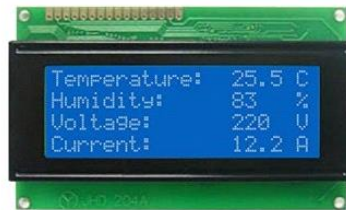
Soil Hygrometer



Servo Motor



LCD Panel



Reflectance Sensor



Ultrasonic Sensor



Temperature/Humidity Sensor



ZigBee Wireless



WHAT'S
NEXT?

Extensible....