SASA- Chitti Version 3.0

Introduction:

Much of what we know about the elemental composition of Mars comes from orbiting spacecraft and landers. If you google something about this, all you can find is “there ‘may’ be iron, magnesium, calcium, etc”. There is no proper confirmation as to which element is present where and in what quantity. With our project, we intend to find the accurate list of elements found in the Martial soil and hopefully in other planets as well. A few more features we incorporate into our idea are mentioned below.

Our Idea:

1) We at SASA, intend to find the accurate list of elements found in the Martian soil and hopefully in other planets as well. We will also find the soil moisture which will help us realize if water is available in the soil in that area (will also help find out if the planet has water or not) and hence come up with a conclusion whether the planet is habitable or not.
2) Find the weather, temperature and pressure of the planet.
3) 100% solar-powered rover.
4) Autonomous navigation of rover using image processing.
5) Feature detection for planetary exploration.
6) Bore to dig into the soil (to better capture soil constituents and planet temperature). We also take a sample of this soil for further analysis.
7) We also intend make mesh figures of the surface of the planet so a proper knowledge of its surface pattern can be kept (say find craters and holes).
8) Space stations for data transmission.

Tech Used:

Arduino, ROS, Artificial Intelligence, HTML, CSS, JavaScript.

Our Future Plans:

Being Freshers with insufficient knowledge and resources, we are facing problems sending data directly to our receivers on Earth and hence we intend to use space stations. We hope, with experience, the need for this will be removed.

We hope you liked our idea!