



ARESROBOTICS

TEAM

ARES

Brochure '21



Meet The Team

We are young Engineering undergrads from **Netaji Subhash University of Technology** representing India in various International competitions like **ERC and URC**.

We aim for designing and fabricating a fully functional Rover that can be used in the **early exploration of Mars**.



Recently we were ranked among the **top 10 teams across the globe** by ERC.

We will be the **only team representing INDIA** at this year's ERC On-site competition to be **held at Poland**.





Mission

Learn and implement the latest innovation, research, and pragmatic understanding to make a fully functional MARS Rover.

Represent India at top-notch global competitions such as European Rover Challenge and University Rover Challenge.

Our Journey

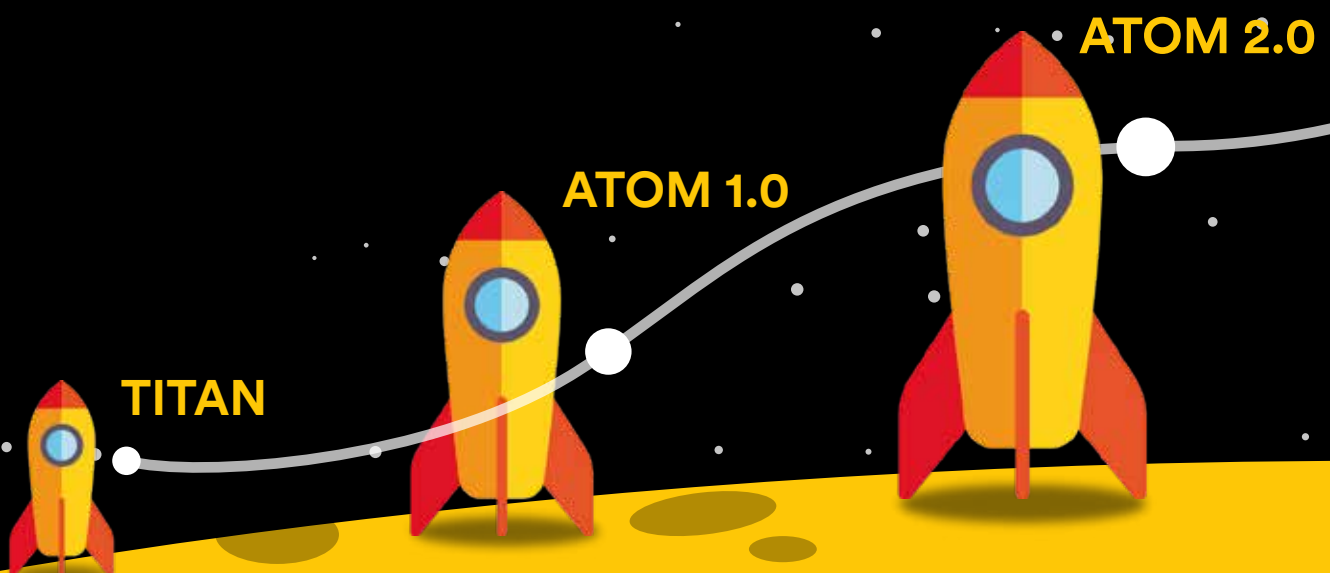
When did our journey begin?

It was a chilly morning when a senior had this dream.... Just kidding. It was **October, 2017** when the pillars of ARES were established by the joint efforts of some of our seniors.

Where do we stand now compared to when we started?

"The journey of a thousand miles begin with one step" We took our first step with around 30 student members and all had a collective **vision of building the best possible MARS Rover prototypes**. Now, we've grown into a team of around 100 students and have been able to **build 4 quality rovers**.

We take pride in qualifying for and winning some of the very best rover competitions around the world.





PEGASUS '21

The road ahead?

Take things for granted?
Go easy in the upcoming competitions?

- Nah, **the grind never stops!**

Our main aim is to **keep on improving and challenging ourselves** to get the best out of our team. With the assistance from our collaborators and sponsors, **many more laurels are to be brought.**

Join us in our journey and we won't disappoint you!

ANTENNA

2.4 GHz & 5.8 GHz Antenna

PLATFORM CHASSIS

Aluminium 6063 T6
1.5inch×1.5inch square profile.

SUSPENSION

Double Rocker suspension
with differential bar mechanism.

BATTERY

120 Ah Li-ion



PEGASUS

MOTOR

Stepper Motor

DRILL

Linear actuator mechanism is used as a drilling mechanism for sample collection.

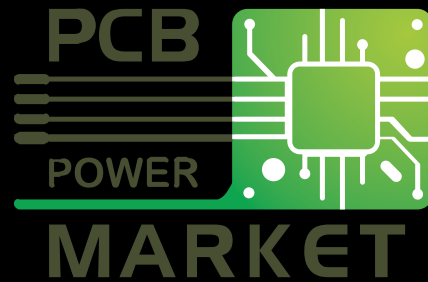
MICROPROCESSOR

Nvidia Jetson Xavier
Raspberry pi 4+ Arduino.

DOF

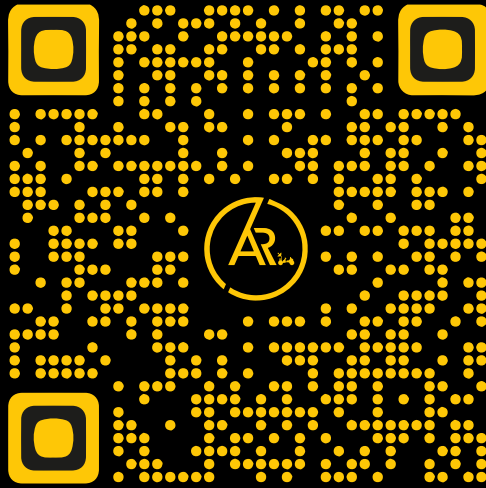
A 5 DOF MANIPULATOR was implemented with inverse kinematics for better accuracy.

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Visit Our Website :
<https://aresroboticsnsut.com>

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