

DJS ANTARIKSH TEAM REPORT (2023-24)

About the Team

DJS Antariksh is the official Martian Rover Team of Dwarkadas J. Sanghvi College of Engineering, Mumbai, India established in 2019-20. The team consists of 50 passionate 2nd and 3rd year undergraduate students from diverse engineering disciplines who are united by a shared mission to push the boundaries of space exploration through innovation. The team's motto, 'To Decipher Unimaginable', embodies its commitment to space exploration. The team aims to represent India at various international competitions like the European Rover Challenge and International Rover Challenge, showcasing its commitment to advancing space exploration by developing cutting-edge autonomous Martian rover technology.

The team comprises of five departments: Electronics, Mechanical, Coding, Science, and Marketing, each contributing significantly to both technical and non-technical aspects of its operations. The team comprises of members with expertise across a broad spectrum of fields, including but not limited to Robotics, PCB and Circuit Design, Artificial Intelligence (AI) and Machine Learning, Additive Manufacturing and 3-D Design.

Team's Creations



ABHYAAN (Team's Rover for ERC 2023 and IRC 2024)



PRAYAAN (Team's Rover for IRC 2023)



Team Structure (A.Y. 2023-24)





Bhanushali Vice Captain



Vedica Bafna Team Manager



Gotarane Vice Captain















Team's Achievements

2020:

International Mars Hackathon

- 8th Worldwide
- 1st in Maharashtra

International Planetary Aerial Systems Challenge

- 2nd Worldwide
- 1st in Asia and India

European Rover Challenge (Remote)

- 3rd Worldwide
- 1st in Asia and India
- Best Science Planning Award

2021:

European Rover Challenge (Remote)

- 1st Worldwide (First Asian Team to Win)
- **Best Science Award**
- **Best Navigation Award**

2022:

European Rover Challenge (Remote)

- 1st Worldwide
- **Best Science Award**

International Rover Design Challenge

3rd Worldwide

2023:

International Rover Challenge

• 8th Worldwide (Debut On-site)

European Rover Challenge (On-site)

10th Worldwide

2024:

International Rover Challenge

3rd Worldwide

International Space Drone Challenge

2nd Worldwide