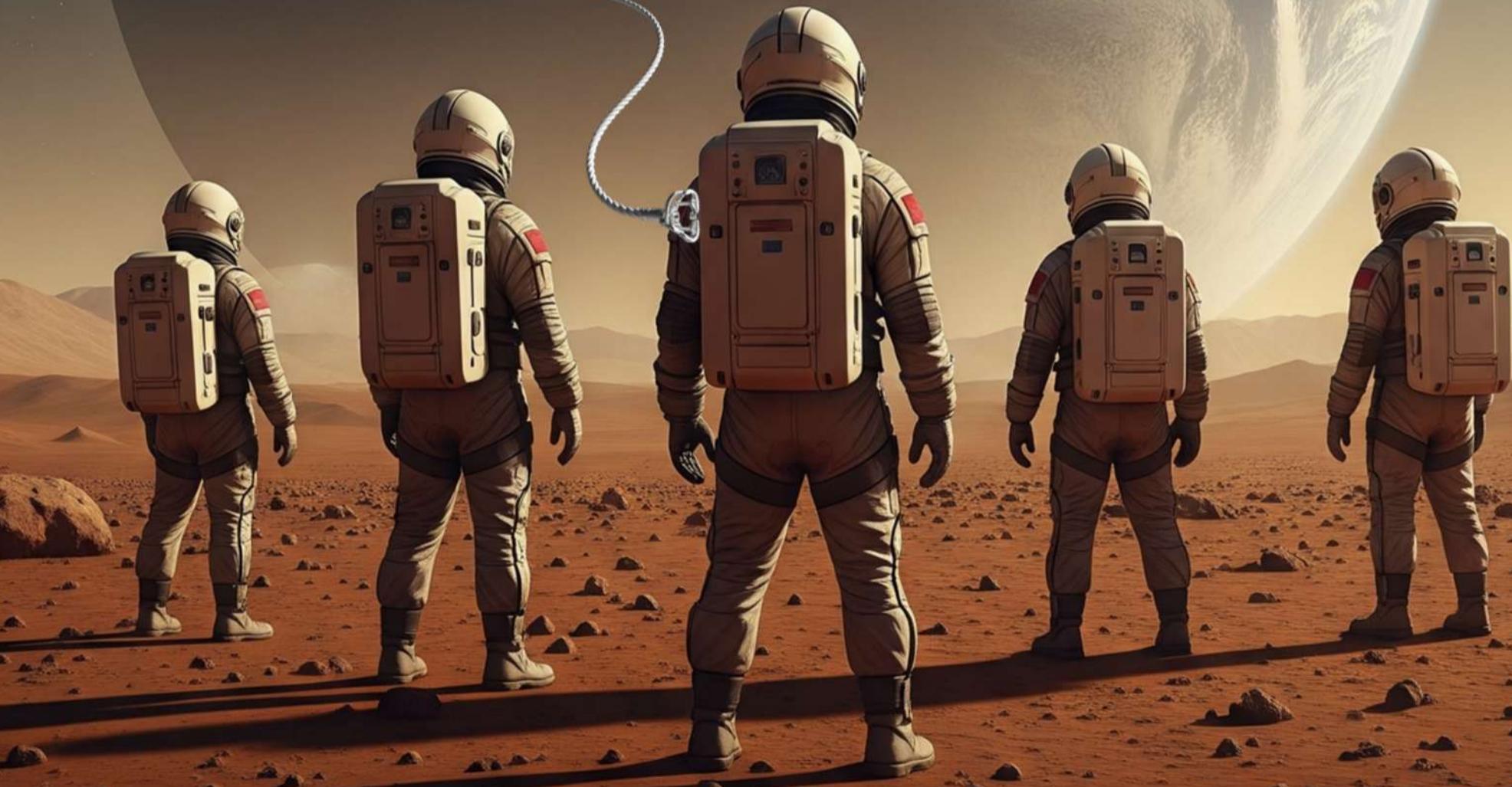# SKY HACK

by

ASTRAKSHAYA

INDIA'S BOLDEST TECH ODYSSEY INTO SPACE BEGINS HERE

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ABOUT THE EVENT

SkyHack is India's premier national-level space-tech hackathon organized by Astrakshaya, designed to ignite the next generation of thinkers, innovators, and engineers.

In an era where space is the next frontier, SkyHack invites students, professionals, and enthusiasts from across the country to ideate, build, and present groundbreaking solutions in space technology, artificial intelligence, and aerospace systems.

This competition is more than just a hackathon it's a launchpad for futuristic concepts, real-world problem-solving, and high-impact innovation. Whether you're developing AI-driven satellites, space debris removal systems, or next-gen launch mechanisms, SkyHack is where your boldest ideas take flight.

With a powerful blend of creativity, engineering, and simulation, this challenge fosters collaboration, celebrates originality, and empowers participants to build what others can't even imagine.

WHO IS IT FOR?

SkyHack is open to all innovators across India from school students to professionals, whether you're a coder, designer, engineer, researcher, or dreamer.

TRACKS & INNOVATION THEMES

At SkyHack, participants are encouraged to tackle pressing challenges in the space-tech ecosystem using a multidisciplinary approach. From AI to sustainable aerospace engineering, your ideas can reshape the future of space exploration.

You can select one of the following innovation tracks or propose a bold, visionary concept under the Wildcard Track.

1. ORBITAL DEBRIS MANAGEMENT

Design systems or algorithms to detect, track, and mitigate space debris. Solutions may involve predictive models, active debris removal mechanisms, or decentralized communication between satellites for debris avoidance.

2. AI-DRIVEN AUTONOMOUS SATELLITE SYSTEMS

Develop intelligent satellite architectures using machine learning and real-time decision-making. Focus areas can include autonomous navigation, onboard anomaly detection, or collaborative satellite constellations.

3. SUSTAINABLE & REUSABLE LAUNCH TECHNOLOGIES

Propose eco-friendly propulsion systems, modular rocket designs, or innovative launch strategies that reduce cost, carbon footprint, and material waste.

4. AI/ML FOR SPACE DATA INTERPRETATION

Use artificial intelligence or machine learning to analyze large volumes of satellite or astronomical data. Applications may include climate modeling, terrain recognition, or anomaly classification in Earth observation data.

5. WILDCARD / OPEN INNOVATION TRACK

Got a groundbreaking idea that doesn't fit into any predefined category? This track is for unconventional, bold, and futuristic space-tech innovations from space agriculture to deep space communication, anything is welcome if it's impactful.

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ELIGIBILITY & TEAM STRUCTURE

SkyHack is an open innovation platform designed to welcome anyone with a passion for space, engineering, and future-tech. Whether you're a student, a coder, a designer, a researcher, or just an enthusiastic mind, this is your launchpad.

WHO CAN PARTICIPATE?

- School Students
- Undergraduate and Postgraduate Students (All disciplines)
- Professionals & Freelancers
- Startup Founders & Innovators
- Independent Researchers & Hobbyists

There are no restrictions based on academic background, age, or technical stream.

TEAM COMPOSITION

- Teams can have 1 to 5 members
- Solo participation is allowed
- Inter-college teams are permitted
- Inter-specialization and cross-discipline teams encouraged
- Participants from different cities/institutions can collaborate

Whether you're a coder teaming up with a designer, or a school student working with a mentor SkyHack is about collaboration without boundaries.

WHY SO OPEN?

Innovation doesn't need a degree. We believe that extraordinary ideas can come from anyone, anywhere. SkyHack is built on that belief.

JOIN THE NEW WAVE OF SPACE THINKERS

SkyHack is your launchpad to transform raw ideas into real impact.
More than a competition it's a movement for future space pioneers.
Collaborate fearlessly. Disrupt boundaries. Build what tomorrow demands.

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FORMAT OVERVIEW

SkyHack is designed to take you through a structured yet flexible innovation journey from raw ideas to impactful execution. The competition unfolds across three rounds, each crafted to bring out your best thinking, creativity, and technical strength. Participants will receive guidance, resources, and timely updates through our official channels and WhatsApp group.

ROUND 1 – IDEATION & CONCEPTUALIZATION

This round focuses on the strength and originality of your idea. You'll be required to submit:

- A concise concept note OR a presentation deck
- Description of the problem statement you're tackling
- Your innovative solution
- A brief on feasibility, impact, tools or technologies you plan to use

Judges will shortlist teams based on clarity of thought, relevance to the theme, and potential for real-world application.

ROUND 2 – PROTOTYPE / SIMULATION / MOCKUP

Shortlisted teams from Round 1 will move forward to develop a proof of concept, which can be:

- A working hardware or software prototype
- A 3D simulation, UI mockup, or concept video
- Submissions may include GitHub repos, design files, or hosted video demos

This round focuses on turning your idea into a tangible, demonstrable solution it's not about perfection, but direction and effort.

ROUND 3 – FINAL PITCH

Finalists will be invited to pitch their solution to a panel of domain experts.

- You may submit a 3–5 minute pitch video
- Or participate in a live virtual pitch session via Google Meet
- Further communication will be shared via registered email and WhatsApp

This is your chance to tell your story not just what you built, but why it matters.

REWARDS & RECOGNITION

SkyHack isn't just about winning it's about making your mark in the future of space technology. But for those who dare to go all the way, here's what's at stake:

PRIZE POOL: ₹30,000 :-

- First Prize: ₹15,000
- Second Prize: ₹10,000
- Third Prize: ₹5,000

ADDITIONAL RECOGNITION

- Certificates of Excellence for the top-performing teams
- Internship offers for selected participants at Astrakshaya's core R&D teams
- Featured on our official website and social channels
- Top submissions may be considered for long-term collaboration

WHY THIS MATTERS

SkyHack isn't just a competition it's a launchpad for India's boldest space thinkers. Winning teams don't just walk away with rewards they leave with visibility, experience, and possibly the beginning of a journey into the real space-tech industry.