



Team

nveshak

<http://anveshak.team/>

IIT Madras

IIT Madras is one of India's most prestigious universities and has an excellent track record in producing high quality engineers and researchers.

Through the years, the institute has played a pivotal role in creating an entrepreneurial environment that motivates students to innovate and develop solutions for local as well as global challenges. Students from various disciplines of Engineering, Sciences and Humanities, come together in an unparalleled display of diversity of thought, and skill to create this environment.



About Us

Prof. Asokan Thondiyath
Faculty Advisor for the team



Team Anveshak, one of the flagship teams of CFI, represents IIT Madras in the Rover Challenge Series, a premiere international robotics competition conducted annually for University students, by the Mars Society.

Started in November 2015, Team Anveshak was built on the strength of students who had earlier participated in and won several national competitions such as **Robocon** (2004 - 2014), **ASME** (2015) and Inter **IIT Tech-meet** (2015 and 2016), besides developing projects as a part of the iBot club.

We successfully completed our maiden participation at the **University Rover Challenge 2017**, Mars Desert Research Station, Utah, USA. We were placed at 29th position among 82 other teams.



Team Structure

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graph LR; Root(( )) -- Orange --> CS[Chassis and Suspension]; Root -- Orange --> ST[Science Task and Digger]; Root -- Orange --> MG[Manipulator and Gripper]; Root -- Grey --> CSW[Control Software and Autonomous navigation]; Root -- Grey --> CSys[Communication systems]; Root -- Grey --> MC[Main Controller Board And Instrumentation]; Root -- Grey --> PBM[Power and Battery Management system]; Root -- Dark Grey --> O[Outreach]; Root -- Dark Grey --> M[Media];
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Chassis and Suspension

Science Task and Digger

Manipulator and Gripper

Control Software and
Autonomous navigation

Communication systems

Main Controller Board
And Instrumentation

Power and Battery
Management system

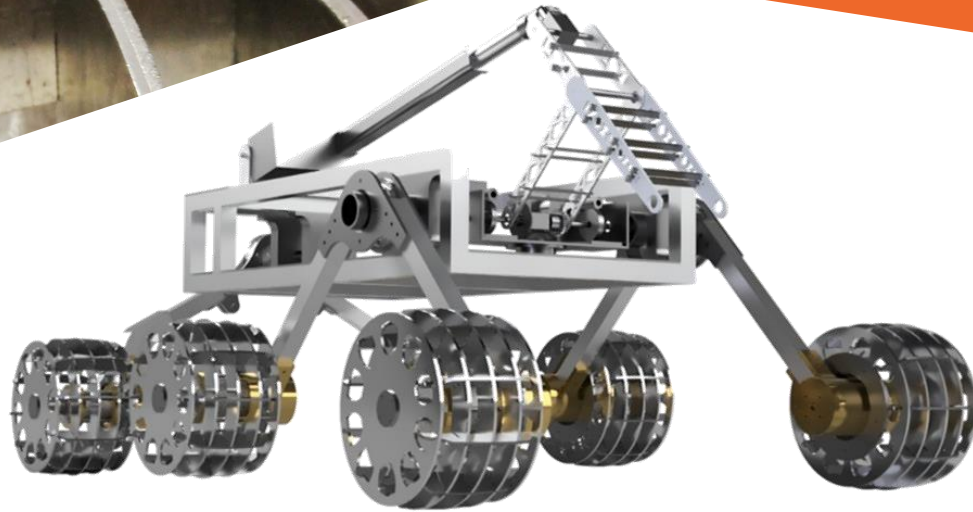
Outreach

Media

Team Anveshak boasts of a flexible and dynamic team structure that is equipped with well-rounded people working round the clock on building inspiring technologies.



Aurora



The first version of our Mars Rover – Aurora (February 2017)

At Anveshak, we engineer a powerful autonomous rover for space exploration, with utmost passion and precision. **Aurora**, the first version of our Rover, is a great example of efficient design blended with a reliable control and power system. The entire design and fabrication was completed within a tight time-frame of 4 months. The rover's ability to encounter harsh drops makes it remarkable. A heavy-duty robotic arm has been carefully designed and analyzed for equipping the rover with manipulation capabilities.

This year, we are upgrading the design for an improved performance and robustness accompanied by a more powerful electronics architecture.



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URC 2018

What we have for you

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<http://anveshak.team>

OR

Reach us back through
teamanveshak@smail.iitm.ac.in

Thank You!

