



Indian Institute of Technology Kanpur



# INSTITUTE LECTURE SERIES

July 15, 2024 (Monday) | 5 pm | L - 8

**Talk Title: Mars Pathfinder Mission - a Pivotal Moment in Robotic Exploration of Space**

**Speaker: Dr. Rajiv Desai**  
CEO, 3Di System

## About the Speaker



Dr. Rajiv Desai, a distinguished figure in robotics and artificial intelligence, began his remarkable career in 1988 at NASA's Jet Propulsion Laboratory (JPL). There, he led a team that developed groundbreaking microrovers, culminating in the historic Mars Pathfinder Mission in 1997, which marked the first successful landing of a rover on Mars. His innovative contributions were recognized with NASA's Exceptional Achievement Medal in 1993 for his outstanding leadership in robotic technology and the Lew Allen Award for Excellence in 1994.

Dr. Desai received his B.Tech. in Mechanical Engineering from IIT Kanpur in 1982. Then he joined the University of Michigan, Ann Arbor, USA to pursue dual MS degrees in Mechanical and Computer Engineering. In 1987, he obtained a Ph.D. in Mechanical Engineering from the same university and in 1994, he obtained an MBA from Massachusetts Institute of Technology Sloan School of Management, USA.

In 1997, Dr. Desai transitioned to entrepreneurship, founding several successful robotics and software technology companies. Currently, he serves as the CEO of 3Di Systems, a global software services company with operations in the US and India. His pioneering research and leadership have been recognized with numerous accolades, including the Distinguished Alumnus Award from IIT Kanpur in 2007, honoring his significant contributions to technology and innovation.

## Abstract of the Talk

The Mars Pathfinder mission, arriving on the Martian surface in July 1997, marked a pivotal moment after a 22-year absence in successful missions since the Viking landings of September 1975. The Pathfinder mission transformed the landscape of planetary exploration by demonstrating new technologies for landing and surface exploration on Mars, paving the way for future missions to the Red Planet.

This presentation will delve into the complexities of orchestrating a robotic mission to Mars, unravel the genesis and evolution of the Mars Pathfinder mission, and illuminate its profound impact on shaping future missions for robotic exploration of space.

All are cordially invited to attend

Office of Dean Research & Development