## Dr Jyoti Joglekar's

Dr Jyoti Joglekar's journey as a Distinguished Fellow in the IIT Alumni Council AI Forum is a remarkable narrative of vision, tenacity, and pioneering achievement in Artificial Intelligence, Holographic Imaging, and Computer Vision.

Born with a keen aptitude for engineering, Dr Joglekar first earned her Bachelor of Electrical Engineering from Walchand College of Engineering, Sangli, and a Master's degree in Computer Engineering from Mumbai University before pursuing a PhD at IIT Bombay, specializing in Satellite Image Analysis and stereo image correspondence using neural networks. Her doctoral work involved collaborating with ISRO using Chandrayaan-1 data, contributing directly to core data analysis and photogrammetric applications for Indian space research.

Her career spans over thirty years, with a blend of academia and industry experience. Dr Joglekar's passion for research led her to the international stage, presenting work at esteemed conferences like ISPRS in France and Germany. She is a respected reviewer for top journals, including IEEE Transactions on Geoscience and Remote Sensing, and has published more than 25 scientific papers internationally. As a professor at KJ Somaiya College of Engineering, Mumbai, her subjects range from Computer Vision and Neural Networks to Big Data Analytics and Cybersecurity, mentoring over 50 undergraduate and postgraduate projects.

The transformative impact of Dr Joglekar's innovations in holographic imaging and AI has reached far beyond the classroom. Her cutting-edge developments are applied in disaster management, agritech, healthcare diagnostics, and smart urban planning—areas vital to social progress and economic resilience in India and globally. She secured competitive grants for ambitious projects, including remote crop monitoring under Indo-Russian collaboration and autonomous UAV swarm intelligence for optimized image processing.

Her selection as the most eminent alumnus in AI & ML-related imaging by the IIT Alumni Council, and being honored as a Distinguished Fellow, celebrates not just her academic excellence, but her commitment to real-world impact and technological leadership. Dr Joglekar's work on foundational platform technologies—often developed from scratch due to restricted access from global defense and space sectors—demonstrates her ingenuity and the multiplying effect of inspiring and training the next generation of engineers.

Today, Dr Jyoti Joglekar continues as a mentor and advisor within the IIT ecosystem and multiple advisory boards, shaping India's research ecosystem, driving collaboration for advanced sustainable technology, and setting benchmarks in AI-driven innovation. Her story is one of unyielding curiosity, deep expertise, and a lifelong dedication to uplifting the scientific and technological landscape.