



IITM
PRAVARTAK
CATALYSING INNOVATION



विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY

सत्यमेव जयते

Thuli

IITM Pravartak Technologies Foundation

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About

IITM Pravartak Technologies Foundation is funded by the Department of Science and Technology, Government of India, under its National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) and hosted as a Technology Innovation Hub

(TIH) by IIT Madras. The NM-ICPS is a comprehensive mission aimed at complete convergence with all stakeholders by establishing strong linkages between Academia, Industry, Government, and International Organizations.

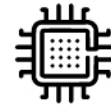
Thematic AREAS



Sensors



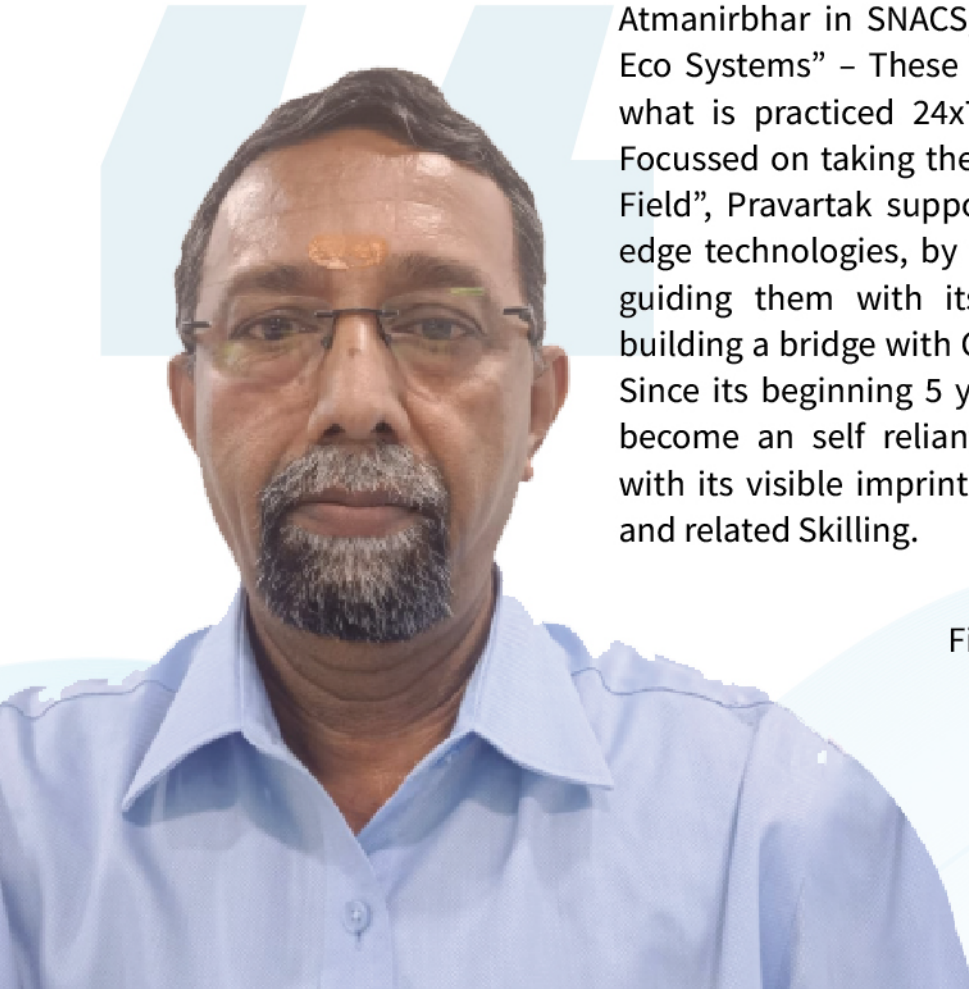
Networking



Actuators



Control Systems



Atmanirbhar in SNACS, Catalysing Innovation, Start Up Eco Systems” – These are not just buzzwords; they are what is practiced 24x7 at IITM Pravartak Foundation. Focused on taking the “Academic Research from lab to Field”, Pravartak supports start ups developing cutting edge technologies, by funding and incubating startups; guiding them with its subject matter expertise and building a bridge with Corporates and R&D partnerships. Since its beginning 5 years back in 2020, Pravartak has become an self reliant organization (400+ personnel), with its visible imprint in Technology driven ecosystems and related Skilling.

Mr. Mani Ramamurthy,
Finance Controller - IITM Pravartak

Events



On **3rd & 4th Jan 2025**, IITM Pravartak Technologies Foundation participated in the IIT Madras Institute Open House 2025 as part of the Anaivarukkum IITM initiative. The event welcomed over 60,000 visitors and featured 60+ stalls, cutting-edge research centers, and advanced laboratories. IITM Pravartak proudly showcased its contributions in technology, entrepreneurship, and start-ups, inspiring curiosity and innovation among students and professionals. The Technology Innovation Fair highlighted creative solutions to real-world challenges, fostering engaging discussions and fresh perspectives. We are grateful for the overwhelming response and look forward to the next edition of this incredible event!



On **16th Jan 2025**, IITM Pravartak Technologies Foundation proudly participated in the 5th anniversary of the Science and Heritage Research Initiative (SHRI) in New Delhi, led by Honorable Union Minister Dr. Jitendra Singh. The event celebrated the fusion of India's heritage with modern technology, where IITM Pravartak showcased innovative heritage projects in Konkan, Ajanta, and Hampi. A major highlight was the launch of the Ajanta VR Video, developed with ASI, DST, and the Indian Heritage in Digital Spaces initiative, using advanced 3D scanning and animation to digitally preserve the Ajanta Caves. The project received high appreciation from the Honorable Minister and the DST team. IITM Pravartak was honored to contribute to heritage preservation and engage in discussions on the future of science, heritage, and innovation, reinforcing its commitment to impactful advancements for Viksit Bharat.



On 20th and 21st Jan 2025, (the Transforming Higher Education and Research for Industry Value Enhancement (THRIVE) Workshop was held at IIT Madras, co-organized by the Ministry of Education (MoE) and the Asian Development Bank (ADB). The event brought together leaders from 41 academic institutions to strengthen academia-industry partnerships, fostering innovation, job creation, and economic growth. The workshop featured expert talks by distinguished speakers from Dream Incubator, ABEEK, IITs, and ADB, along with in-depth discussions on transforming higher education. Participants also embarked on a study visit across the IIT Madras Research Park ecosystem, exploring key innovation hubs including InCent-LGD (lab-grown diamond research), AgniKul Cosmos (space-tech), R2D2 (assistive devices), AMTDC (manufacturing tech), IITM Incubation Cell (startups), and IITM Pravartak (emerging technologies). This immersive experience showcased the synergy between academia, industry, & innovation—advancing the collective vision of a Viksit Bharat Abhiyan.

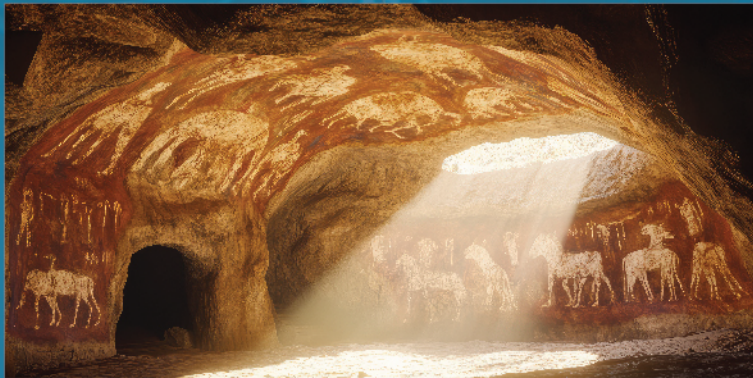


On 28th Jan 2025, IITM Pravartak Technologies Foundation was proud to be part of the 18th Pravasi Bharatiya Divas (PBD) in Bhubaneswar, Odisha, where we showcased our Ajanta VR Film at the Department of Science and Technology Pavilion. The event brought together NRIs, officials, and industry leaders, providing a great platform to share our work in preserving India's cultural heritage through technology. The enthusiasm and interest from visitors were truly inspiring, reinforcing our commitment to innovation. We look forward to continuing our efforts in blending tradition with technology and creating a lasting impact.





On **2nd Feb 2025**, we successfully conducted Sony's ATRIOS Hackathon Workshop, where 15 shortlisted teams received hands-on training and valuable insights into both software and hardware aspects of Sony's solutions. Experts from Sony India and the IITM Pravartak Team led interactive sessions, exploring the feasibility, motivation, and potential of each idea. The workshop featured discussions on refining solutions, addressing challenges, and validating ideas, along with opportunities for networking and knowledge sharing with industry and academic leaders. This milestone marked a crucial step toward the next phase of the hackathon, where these ideas will transform into impactful solutions.



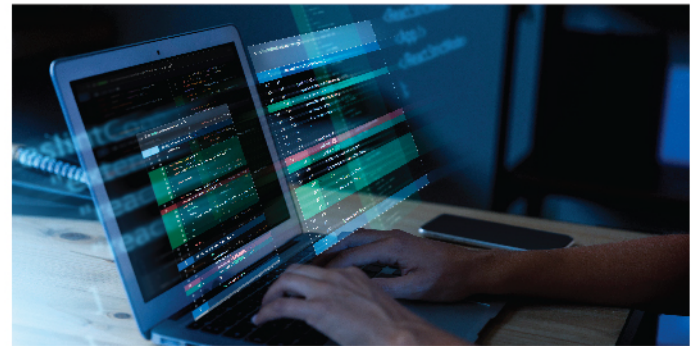
On **14th to 16th Feb 2025**, we were thrilled to host Ashma Vadh: A Variscite Program of Konkan Geoglyphs, a unique exhibition celebrating prehistoric wonders through art, history, and culture. Held at The Box Hub in Pune, the event brought together enthusiasts to explore the hidden heritage of Konkan's geoglyphs.

The program featured engaging activities, including a Marathi theatre act, documentary screening, expert talks, classical dance performances, and narrative discussions on human behavior. Visitors also experienced prehistoric stone tools, knapping demonstrations, interactive exhibits, and art displays inspired by ancient cultures.

With free entry, the event welcomed a diverse audience, creating a meaningful connection between the past and present. We sincerely thank everyone who joined us in celebrating this fascinating heritage!



On **22nd Feb 2025**, Chennai hosted its first-ever PostgreSQL Open-Source Meetup at the IITM Research Park. The event brought together database enthusiasts, developers, and industry experts for a day of insightful technical sessions, interactive discussions, and vibrant networking. Key sessions were delivered by Dr. Ethirajan from CDAC and Mr. Vasan from IITM Pravartak, focusing on PostgreSQL trends, real-world applications, and community-driven development. Participants, whether seasoned professionals or newcomers, explored the evolving PostgreSQL ecosystem and discovered new ways to contribute to the open-source community. This landmark event marked the beginning of an exciting journey for Chennai's growing tech and open-source network.



On **5th to 7th Mar 2025**, IITM Pravartak was proud to sponsor PgConf India 2025, one of the premier open-source conferences, held in Bangalore. The event provided an excellent platform for industry leaders, developers, and architects to engage in discussions on the evolving landscape of open-source technology. On **6th Mar 2025**, our team hosted insightful tech talks, highlighting key advancements and innovations in the field. We also had the opportunity to connect with professionals at our booth, fostering meaningful conversations on the future of open-source development.

Industry-Focused Courses by IITM Pravartak & Coding Ninjas.



On **29th Mar 2025**, IITM Pravartak had the pleasure of partnering with Coding Ninjas to launch a series of professional certification courses aimed at empowering graduates and working professionals with industry-relevant technical skills. These programs were designed to bridge the gap between academic knowledge and industry expectations, providing hands-on learning opportunities in high-demand domains such as programming, data science, and software development. The initiative received an enthusiastic response from participants eager to upskill and enhance their career trajectories. We are proud to have contributed to their professional growth and look forward to further collaborations that foster skill development and technological excellence.

Visits



On **17th Jan 2025**, IITM Pravartak Technologies Foundation had the honor of hosting delegates from the International Tamil Engineers Forum (ITEF), also known as the Global Tamil Engineers Forum (G-TEF). The visit focused on advancements in Sensors, Networking, Actuators, Control Systems, and Cyber-Physical Systems, along with discussions on entrepreneurship initiatives. Delegates explored IITM Pravartak's innovation ecosystem, interacting with dynamic start-ups like 32Mins Digital Consultancy Services and Music Temple. They also visited key innovation hubs, including the IITM Incubation Cell and the AMTDC Centre of Excellence, gaining insights into the processes driving research, innovation, and technology-driven entrepreneurship. This meaningful exchange has paved the path for future synergies.

VISITS



On **20th Jan 2025**, IITM Pravartak Technologies Foundation had the honour of hosting Vice Admiral Sanjay Vatsayan and his team from the Indian Navy at the IITM Research Park. The visit highlighted advancements in SNACS, and Cyber-Physical Systems, showcasing innovative solutions to support national defence. The delegation engaged with start-ups and explored key research hubs, including the Centre of Excellence AMTDC and Agnikul Cosmos, gaining insights into emerging technologies in machine tools, production, and space exploration. Vice Admiral Sanjay Vatsayan's valuable feedback reinforced the importance of industry-academia collaboration in strengthening India's technological capabilities, paving the way for future partnerships.



On **28th Jan 2025**, we were delighted to welcome faculty and students from Bannari Amman Institute of Technology to IITM Pravartak Technologies Foundation. Their visit was filled with engaging discussions as they explored our startups, ongoing projects, and research initiatives. Their enthusiasm and curiosity made the experience truly valuable, and shared insights set the stage for continued collaboration.



On **31st Jan 2025**, IITM Pravartak Technologies Foundation had the privilege of hosting Mr. V. Mahadesha, Director of STPI, for an insightful discussion on its work in AR/VR, Database Engineering, 3D Imaging, and more. The team showcased ongoing projects pushing the boundaries of digital innovation, emphasizing the importance of industry-government collaboration in driving technological growth. The exchange of ideas provided valuable insights, reinforcing IITM Pravartak's commitment to impactful innovation and national development.



On **31st Jan 2025**, IITM Pravartak Technologies Foundation took part in PIWOT 2025 in Mumbai, organized by PanIIT Alumni India and presented by Reliance Industries Limited. With over 3,500 delegates, the event focused on "Technology at Work." IITM Pravartak highlighted its deep-tech innovations, startup incubation, and industry-academia partnerships. A key attraction was the Ajanta VR Program, developed under the SHRI initiative by DST, offering a virtual tour of the Ajanta Caves. The Foundation also showcased national projects and emerging startups, reinforcing its role in driving research, innovation, and heritage preservation.



On **3rd Feb 2025**, we were privileged to host Shri Sanjeev Sanyal, a member of the Economic Advisory Council to the Prime Minister and Secretary to the Government of India, at our office. His visit included exploring our pioneering work in Sensors, Networking, and 5G technology, interacting with startups like Music Temple, and touring our Incubation Cell and Agnikul. It was an inspiring exchange of ideas that motivates us to continue driving innovation and collaboration for a progressive Viksit Bharat.



On **3rd Feb 2025**, Lieutenant General Michael AJ Fernandez, Commandant of the Officers Training Academy (OTA), visited the IIT Madras Research Park and IITM Pravartak Technologies Foundation with his team for an engaging exchange on military-academia innovation. The visit highlighted key facilities, including the India Centre for Lab-Grown Diamonds, IITM Incubation Cell, AgniKul Cosmos, R2D2, AMTDC, and IITM Pravartak, showcasing their role in defense and technology advancements. Discussions focused on fostering innovation, self-reliance, & stronger collaborations between academia and the military, paving the way for future strategic partnerships in support of Viksit Bharat.



On **4th Feb 2025**, we had the pleasure of hosting Dr. Rahul Singh Amritraj, Head of the Centre for Medical Innovation, GIMS (Govt. of UP), at IITM Pravartak Technologies Foundation. His insights and experience in medical innovation made for an inspiring discussion on the future of MedTech and incubation. During his visit, he explored cutting-edge technologies and visited the IITM Bio-Incubator, where he appreciated the impactful work bridging technology and medicine. The visit highlighted exciting collaboration opportunities between IITM Pravartak and GIMS to drive healthcare innovation for a Viksit Bharat.



On **5th Feb 2025**, we were honored to host Lion Brewery (Ceylon) PLC at IIT Madras Research Park and IITM Pravartak Technologies Foundation for an engaging discussion on industry-academia collaboration. The delegation interacted with IITM Incubation Cell, AMTDC, and AgniKul, gaining insights into cutting-edge innovations in manufacturing, start-ups, and space technology. The Lion Brewery team appreciated the spirit of innovation at IIT Madras, opening the door to exploring long-term partnerships for technology-led industrial growth and transformation.



On **10th Feb 2025**, we had the honor of hosting Dr. Ramnath Velamati, Executive Vice Chairman of the Global Forum for Sustainable Transformation and Advisor to the Government of Andhra Pradesh, at IITM Pravartak. During his visit, he explored our thriving startup ecosystem, the state-of-the-art 5G Lab, and the Centre for Human-Centric AI. His insightful discussions with our teams and startups were truly inspiring. We sincerely thank Dr. Ramnath Velamati for his visit and are excited to strengthen this collaboration for greater innovation and impact.



On **12th Feb 2025**, we had the honor of hosting faculty members from M.S. Ramaiah College of Engineering (MSRCE), a renowned institution known for its excellence in engineering, technology, and management education. The visit provided a valuable platform for knowledge exchange, featuring insightful sessions on startup development, incubation, and entrepreneurship, along with engaging interactions with startups like 32Mins Digital Consultancy Services, Music Temple, Swayatt Drishtigochar, and Vaan Megam Networks. The faculty also toured our advanced facilities, including the IITM Incubation Cell, Advanced Manufacturing Technology Development Centre, and R2D2 IIT Madras, where they explored cutting-edge innovations. Their enthusiasm and thought-provoking discussions reflected their commitment to integrating academic knowledge with real-world applications. Looking ahead, we remain committed to nurturing future innovators through this continued partnership.



On **24th Feb 2025**, IITM Pravartak Technologies Foundation hosted delegates from the Ministry of Education, Government of Jharkhand, showcasing advancements in technology, manufacturing, and entrepreneurship. The visit included explorations of the Advanced Manufacturing Technology Development Centre, the TTK Center for Rehabilitation Research and Device Development, and the IIT Madras Incubation Cell, highlighting innovations in precision manufacturing, assistive technology, and startup incubation. The discussions provided valuable insights into collaborative opportunities, reinforcing efforts to drive innovation, entrepreneurship, and inclusive growth.



On **19th Mar 2025**, IITM Pravartak had the pleasure of hosting students and faculty from the Student Mobility Exchange Program, representing the University of Leeds (UK), Dedan Kimathi University (Kenya), University of Dar es Salaam, and Riara University (Tanzania). They explored our innovations in SNACS, along with a tour of our 5G facility and Incubation Centre. Their enthusiasm and curiosity were truly inspiring, motivating us to pursue future collaborations that encourage knowledge sharing and technological progress.



On **29th Mar 2025**, we were honored to welcome Shri N. Chandrababu Naidu, Hon'ble Chief Minister of Andhra Pradesh, to IIT Madras Pravartak Technologies Foundation. His visionary leadership has positioned Andhra Pradesh as a hub for emerging technologies like AI, Blockchain, and Quantum Computing, with initiatives such as the Quantum Valley aligning closely with India's tech future. During his visit, Shri N. Chandrababu Naidu interacted with our innovative startups—Shakra Innovations, Meister-Gen Technologies, and Music Temple Pvt. Ltd.—and explored our 5G Lab and AI Centre, offering valuable insights.

Announcements:



Abhay Karandikar   

@karandi65

There was an excellent showcasing of the innovative technologies developed under SHRI initiatives like “Tales of Ajanta – VR Experience,” a transformative initiative highlighting the beauty of the Ajanta Caves through immersive virtual reality developed in collaboration with IITM Pravartak Technology Hub and the Archaeological Survey of India (ASI).

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On **16th Jan 2025**, IITM Pravartak Technologies Foundation was honored to receive appreciation from Honorable Secretary Prof. Abhay Karandikar for the Tales of Ajanta – VR Experience. This recognition reinforced our commitment to using technology to preserve India’s rich heritage. We are grateful to the Department of Science and the Government of India for their continuous support in blending tradition with innovation. Their encouragement has been instrumental in driving our efforts, and we remain dedicated to protecting and sharing India’s cultural legacy with the world.



On **22nd Jan 2025**, Dr. MJ Shankar Raman, CEO of IITM Pravartak Technologies Foundation, had the honor of speaking at the 3rd Annual Metro Rail Conference 2025 at Radisson Blu Mumbai International Airport. The event brought together industry leaders, policymakers, and experts to discuss the future of urban transportation in India. Dr. Shankar Raman’s session on Digital Transformation in Metro Rail Operations highlighted how advanced technologies are reshaping metro systems through automation and data-driven decision-making. His insights emphasized the importance of innovation in building efficient and sustainable metro networks. IITM Pravartak Technologies Foundation was proud to contribute to this crucial conversation, fostering collaboration for a smarter, more connected future.



On **23rd Jan 2025**, the 3rd edition of vivo Ignite invited young innovators across India to showcase transformative prototypes under the theme Tech for Good. Open to students from Grades 8 to 12, the initiative built on the success of its previous editions, impacting over 22,000 students. With scholarships and prizes worth INR 35 lakhs, participants gained mentorship and the opportunity to drive social change.



acements



On **12th Feb 2025**, we participated in the FICCI West India Skill Connect Summit at Radisson Blu, Mumbai International Airport, where over 250 industry, academic, and government leaders gathered to discuss "Skill Development: Exploring Opportunities." Mr. Balamurali Shankar, Chief Knowledge Officer at IITM Pravartak, shared valuable insights during the panel on "EdTech and Employability: Creating Future-Ready Talent." He highlighted the role of advanced technologies like AI and AR/VR in shaping India's skill landscape and emphasized the collaboration between IITM Pravartak, IIT Madras, and Swayam Plus in fostering a dynamic skills ecosystem. His vision for integrating cutting-edge tech into education aligns with industry needs, preparing the workforce for the future. This summit reinforced the importance of innovation in skill development, and we look forward to contributing to a more skilled and competitive future for India.

MOUS



On **3rd Jan 2025**, IITM Pravartak Technologies Foundation and CoLLearn signed a Memorandum of Understanding (MoU) to launch a groundbreaking Sports Management course in collaboration with the Center of Excellence in Sports Science & Analytics (CESSA) at IIT Madras. The program blends technological innovation with expert-led education, aiming to equip aspiring professionals with industry-relevant skills. By combining IITM Pravartak's expertise in SNACS (Sensors, Networking, Actuators, and Control Systems) with CoLLearn's interactive, cohort-based learning model, the initiative opens new avenues for technology-driven sports education.



On **7th Jan 2025**, IITM Pravartak Technologies Foundation signed a Memorandum of Understanding (MoU) with Valluvar College of Science & Management to strengthen academic and infrastructural collaboration. The agreement aims to foster innovation, skill development, and active participation from both students and faculty. A key highlight is the establishment of a Centre of Excellence to promote research and learning, creating new opportunities and enhancing the overall academic environment.



On **31st Mar 2025**, IITM Pravartak Technologies Foundation signed a landmark MoU with the Ministry of Panchayati Raj, Government of India, and IIT Madras, to launch a transformative project focused on preserving the heritage and culture of Panchayats across India. This initiative aims to empower rural economies, generate employment, and integrate Tier-3 towns and Panchayats into the mainstream economy. We were honored to host Shri Akhilesh Jha, IAS, and collaborate with NID Ahmedabad and IIT Madras to drive this vision forward. Together, we move closer to building a Viksit Bharat, a developed India, where heritage and progress go hand in hand.

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