





Deep Dive

August 2024



An E-Newsletter from Tamil Nadu Technology Hub

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Foreword

Dear stakeholders of the Tamil Nadu Emerging and Deep Tech Startup Ecosystem. August was another eventful month for iTNT Hub, with the Hub studying the global best practices in the innovation ecosystem and delegations from Australia, Madhya Pradesh and West Bengal visiting the hub

Representing iTNT, I was among the delegation to Germany, comprising Thiru. Veera Raghava Rao, I.A.S., Secretary, Labour Welfare and Skill Development; Tmt. Mariam Pallavi, I.A.S., Special Secretary, Industries IP&C; and Thiru. Sandeep Nanduri, I.A.S., MD-TIDCO. It was a fruitful visit and study of Fraunhofer Institute for Production Technology and RWTH Aachen Campus ecosystem to develop Tamil Nadu's Research, Development, Innovation, and Knowledge ecosystem through the establishment of Innovation Clusters like URPs, CoEs, and Knowledge City. This will boost the State's global innovation ranking.

iTNT conducted the second edition of our flagship Innovation Challenge. We received more than 500 applications from teams comprising innovative startups, researchers and startup aspirants from across the State for the "Unlock The Future" Innovation Challenge, focusing on 6 challenge sectors. The challenge promises a cash prize of Rs. 4.5 Lakh for the winners of the first three places. It doesn't stop there, as we will extend all possible support to the winners and other innovative solutions to get incubation, acceleration and other possible support from iTNT Hub to help them emerge into successful enterprises.

iTNT was overwhelmed to welcome a delegation from Western Australia, led by Dr. Jagadish Krishnan MLA, Parliamentary Secretary to the Premier and Minister for State and Industry Development, and Mrs. Nashid Chowdhury, Investment and Trade Commissioner, Government of Western Australia, India-Gulf Region. Facilitated by Meity, we also had delegates from the Madhya Pradesh State Electronics Development CorC poration Ltd and West Bengal Electronics Industry Development Corporation to study the best practices of iTNT and to discuss future collaborations.

September is going to be another exciting and action packed month. We are hosting the first "iTNT Industry Conclave" to explore avenues for Industries and Corporates to collaborate with our startups and to contribute to the Research & Development & Innovation landscape of Tamil Nadu. We are also having the first roundtable for the Tamil Nadu Deep Tech Policy, announced by the Hon'ble Minister for Information Technology & Digital Services Dr. Palanivel Thiaga Rajan in the Tamil Nadu Assembly, which will be anchored by iTNT.

The hub has launched the 3rd edition of our Beacon bootcamp for idea and early stage startups. We are also welC coming applications for our first iAccelerate acceleration cohort and encourage growth-stage startups to be a part of it. Stay tuned for updates on these exciting developments among others in September on our social media handles.



Best wishes, Vanitha Venugopal CEO, iTNT Hub



Tamil Nadu Delegation Studies Best Practices in Germany



iTNT Hub CEO Ms. Vanitha Venugopal was among the official delegates from Tamil Nadu that visited and studied the established Innovation ecosystem in Germany during the last week of July. The delegation comprised Thiru. Veera Raghava Rao, I.AS., Secretary, Labour Welfare and Skill Development; Tmt. Mariam Pallavi, I.A.S., Special Secretary, Industries IP&C; Thiru Sandeep Nanduri, I.A.S., Managing Director, Tamilnadu Industrial Development CorC poration (TIDCO) Limited; TIDCO Senior General Manager Thiru. R. Karthikeyan and Vice President Thiru. Nixon Raj.



The delegation visited Fraunhofer Institute for ProC duction Technology (IPT) and the RWTH Aachen Campus Ecosystem. At Fraunhofer IPT, experts gave a demonstration of the facility, an introduction to Fraunhofer Society and its innovation platforms, insights into Fraunhofer Office India - highlighting collaborations and initiatives - and tour of the shopfloor, showcasing cutting-edge production technologies.



They also experienced live demonstrations of production processes and innovative manufacturing techniques. They had an in-depth understanding of the integration of advanced production technologies in real-world applications, and the role of demonstration factories in bridging the gap between research and industry.





At RWTH Aachen Campus, the delegates understood their state-of-the-art model of fostering innovation through a structured approach to innovation and collaboration, and the synergy between academic research and practical industrial applications. They studied the need to integrate advanced production technologies within local innovation hubs, and on establishing demonstration factories to foster hands-on learning and industry collaborations.





Possibilities of strengthening collaboration to promote partnerships between institutions in Tamil Nadu and international innovation platforms like Fraunhofer IPT and RWTH Aachen to encourage cross-border collaborations to leverage global expertise were explored. The delegation also had deliberations on creating a sustainable model that supports continuous innovation and practical applications.



What's Brewing at iTNT Hub?



Western Australia delegations visits iTNT

iTNT Hub hosted a delegation from Western Australia, led by Dr. Jagadish Krishna MLA, Parliamentary Secretary to the Premier and Minister for State and Industry Development. The Minister, Mrs. Nashid Chowdhury, Investment and Trade Commissioner, Government of Western Australia, India-Gulf Region; and others had fruitful discussions with Ms. Vanitha Venugopal, CEO, iTNT Hub, on collaborations and promoting DeepTech entrepreneurship in the two regions.





Madhya Pradesh Delegation at iTNT

iTNT Hub hosted a delegation from Madhya Pradesh State Electronics Development Corporation Ltd last week. As part of the exchange of ideas, Ms. Madhavi Soni, Assistant Director, Mr. Kapil Sharma, Project Manager, and Ms. Asha Vidhyadhran, Consultant from MPSEDC learnt the role of iTNT Hub in the Emerging and Deep Tech space in the overall startup ecosystem of Tamil Nadu and the stakeholder management. They understood the best practices of iTNT Hub that could be implemented at Madhya Pradesh. The delegation had insightful discussions with iTNT Hub CEO Ms. Vanitha Venugopal and the team, following which they visited state-of-the-art Centers of Excellence run by the Government of Tamil Nadu.





West Bengal Delegation at iTNT

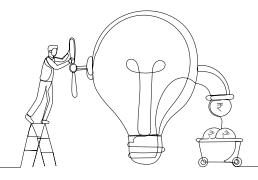
iTNT Hub was privileged to host a delegation from Webel (West Bengal Electronics Industry Development Corporation Limited), recently. Mr. Zeeshan Khan, OSD IT&E; Mr. Kausik Halder, Manager & Head of Education & Training, Emerging Technology and Information Security; Mr. Debraj Ghoshal, Sr. Manager (NWD), Webel; Mr. Mainak Sen, Manager (IT), Webel; and Mr. Tuhin Samanta, PMU IT&E; were part of the delegation. They engaged in depth discussions with iTNT Hub CEO Ms. Vanitha Venugopal and the team. iTNT Hub and WEBEL also discussed possibilities for collaborations to benefit innovative startups from both the States. Later that day, thedelegation with iTNT team also visited state-of-the-art Centers of Excellence run by the Government of Tamil Nadu.



Unlock The Future: Innovation Challenge

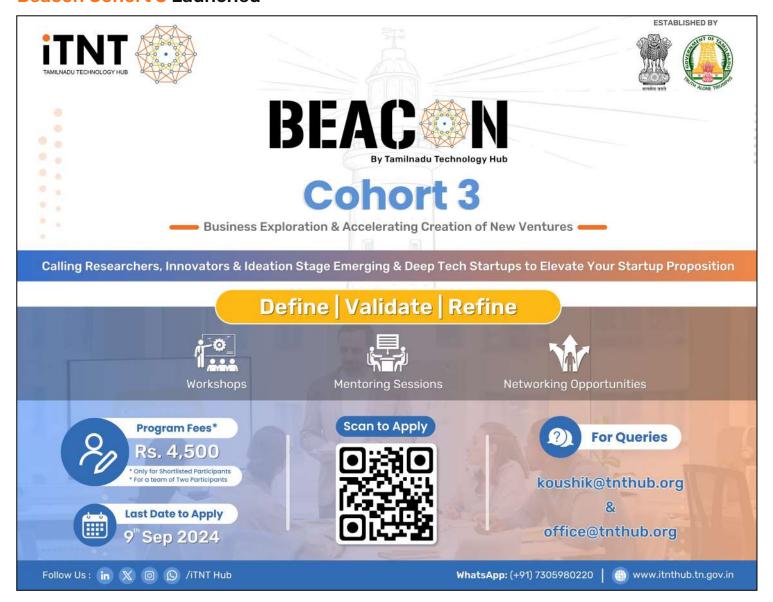


After the successful completion of the "Break the Loop" Innovation Challenge, iTNT Hub launched the "Unlock the Future" Innovation Challenge. The challenge attracted more than 500 applications from across the State, which are now under scrutiny. The top 10 teams will be shortlisted and curated for the Pitch Day in the first week of September. Applicants were invited to develop solutions across critical sectors including Climate Tech, Sustainability, Energy Generation, Healthcare, Smart Manufacturing, and Fintech. The winners of the top three places will be recognised on the big stage, where they will get a cash prize of Rs. 1.5 lakh each. This is in addition to opportunities to get support for incubation / co-incubation and acceleration from iTNT Hub. The challenge opens the doors to all seasoned developers, aspiring entrepreneurs, and creative problem-solvers and transforms ideators and innovators into tech entrepreneurs.





Beacon Cohort 3 Launched



The previous two cohorts of our Idea Validation Bootcamp BEACON (Business Exploration & Accelerating Creation of New Ventures) have been resounding successes. The programs equipped aspiring entrepreneurs with the essential tools and knowledge to transform their nascent ideas into promising ventures. For these cohorts, 23 teams were selected from 115 applications. They were able to refine their concepts and develop robust business models. Through structured curriculum and expert mentorship of these bootcamps they transformed their ideas and seven teams have been further selected for incubation at iTNT Hub.

Are you ready to transform your Deep Tech innovative ideas into successful ventures? Register for the Beacon Cohort 3.0 to launch your Startup ventures through this 4-week intensive bootcamp designed to help you validate, refine, and accelerate your business ideas. The thirdBeacon Cohort is designed to inspire and support aspiring entrepreneurs and innovators.

By refining our proven curriculum, we are committed to empowering even more individuals to reach their entrepreneurial goals, equipping them with the tools and knowledge needed to turn their visions into reality. With this enhanced program, we are not just fostering innovation. We are building the next generation of successful entrepreneurs who will shape the future.



BEACON Offers:

Idea Validation:

Refine your concepts through expert feedback and mentorship. Skill Development: Gain hands-on experience in business model development, market analysis, and pitching.

Networking Opportunities:

Connect with industry leaders, mentors, and like-minded entrepreneurs.

Pathway to Incubation:

Access exclusive resources, funding, and ongoing support through our deep tech incubation program.

Who Should Apply:

Researchers, Innovators, and Ideation-stage Startups working in deep tech domains like AI, IoT, AR/VR, Cybersecurity, and individuals or teams with innovative ideas looking to scale and make an impact.

Apply Now: https://lnkd.in/g4ZC5M2h Application Deadline: September 9, 2024

Cohort Dates: September 27 - October 18, 2024

iTNT on Kalaignar TV's Thayumanavar Show

Inspiring Startups Take the Spotlight



Kalaignar Seithigal TV channel broadcasted the success story of iTNT Hub and the testimonies of the hub's supported startups on their flagship "Thayumanavar" show on 31st August (Saturday). The show featured Ms. Vanitha Venugopal, CEO of iTNT Hub, Mr. K. Janardhan, Principal - Tamil Nadu Emerging Sector Seed Fund, Tamil Nadu Infrastructure Fund Management Corporation, and Mr. A.J. Balasubramanian, Director - Indian Operations at Aigilx Health. Swetha Mohanachandran from Space Tug, Arun Prasath CEO & Co-Founder of Focus AR, Veyyil and Chithra Lekha, CEO of Karotimum were part of the show. The startups that featured in the show spoke about their innovations, journey and how iTNT has played a pivotal role in creating an ecosystem where ideas can take shape in the deep tech arena.



Scan to Watch the Full Episode





Events from August

Mentor Meet: Navigating the Startup Journey with iTNT Hub

Mentor Meet is iTNT Hub's unique opportunity for emerging and deep tech startup founders and innovators to engage with experienced mentors through our monthly one-on-one mentorship sessions. The August 2024 edition of Mentor Meet was held at Tamil Nadu Technology Hub, Chennai, on 22nd August 2024.



This third edition of the monthly meet featured three seasoned mentors: Mr. Sunil David on Al, ML & IoT, Mr. Ganasekara Vignesh and his team on 3D (Additive Manufacturing), and Mr. Kumaravel N on Blockchain. These esteemed mentors shared their insights and guidance with our aspiring entrepreneurs.



Mr. Sunil David, Ex-Regional Director (IOT), AT&T, shared invaluable insights and inspiration with his mentees, drawing from his wealth of experience. One of our Mentee Mr. Robin Thomas from Olive IOT emerged with an enlightened glow from his one-on-one session. Mr. Sunil David gave expert advice on product certification, field deployment, market expansion and testing of MVPs.

Professor Shantha Kumar from TJS College of Engineering attended two sessions with Mr. Kumaravel N and Mr. Sunil David to enhance his Ed.Tech startup Visionwiden Solution. This initiative, dedicated to supporting rural students with placements, overseas education, and project guidance, received invaluable advice.

The mentors encouraged him to think beyond profit-making, fostering a vision for a socially conscious business model that not only empowers students but also creates lasting positive change in their communities. With their guidance, Professor Shantha Kumar was inspired to build a venture driven by purpose, ensuring that every step forward also uplifts the lives of those it touches.

Mr. Easwaran K from Tvasta Manufacturing Solution Pvt Ltd, a company pioneering 3D printing for the construction industry, sought guidance on scaling up their operations. SA Gnanasekara Vignesh and his team from TANSAM stepped in, offering their expertise and support. Together, they explored the possibilities of expanding Tvasta's product offerings and provided invaluable insights on sourcing raw materials from strategic regions, empowering the company to reach new heights.



Several other participants, including Scrapify Ecotech, Jedlik motors, Jannet Global, Blue code application and Steradian.ai also found immense value in the Mentor Meet sessions, walking away with renewed confidence and clear strategies for their startups. The one-on-one interactions with industry veterans not only provided actionable advice but also sparked new ideas and perspectives.

Whether it was refining their business models, exploring innovative technologies, or strategizing for market expansion, each entrepreneur left with a stronger sense of direction and purpose. The August 2024 edition of Mentor Meet proved to be a powerful catalyst for growth, empowering startups to push the boundaries of what's possible in their respective fields.





Masterclass: Future Trends

and Emerging Opportunities in Spatial Computing



iTNT Hub recently hosted a Masterclass on "Future Trends and Emerging Opportunities in Spatial Computing," conducted by Mr. Selvakumar Panneer, Principal Engineer (Graphics & AI) at Intel Corporation. The masterclass was attended by 21 participants from diverse backgrounds and discussions revolved around the advancements in spatial computing, highlighting its potential to revolutionise human-computer interactions and spatially distributed information.

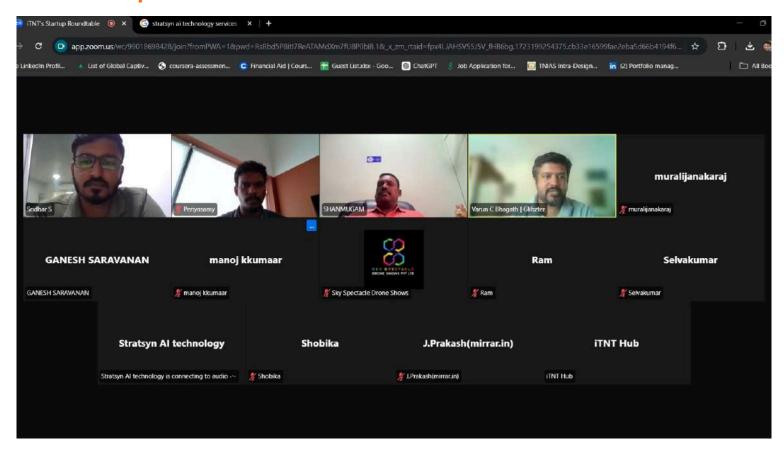
Mr. Panneer traced the evolution of communication from letters to 3D holograms, discussed Microsoft's vision for Immersive Collaboration, and explored spatial computing's transformative impact on Healthcare, Gaming, and Smart Homes. Emphasising the need for advanced computing power and addressing key challenges such as latency and throughput, The speaker noted that the convergence of Al and spatial computing with technologies like neural graphics and Al-based techniques is set to blur the boundaries between the real and virtual worlds.

The session also discussed innovations like Sony's Spatial Displays and Tesla's use of Synthetic Data for Autopilot. The speaker concluded by asserting that "Technology should be a pull, not a push", inspiring participants to envision a decentralised, simplified future driven by spatial computing. The event concluded with an interactive Q&A session.





5th Startup Roundtable



On August 9, 2024, iTNT Hub hosted its 5th Startup Roundtable, gathering 14 startups from various deeptech and emerging tech domains. This online forum provided a vital platform for startups to share their specific needs and challenges. By engaging directly with the innovators, iTNT Hub aims to tailor its support programs more effectively.

The roundtable focused on understanding startup requirements, such as Technical support, Funding, Mentorship, and Networking. This feedback is instrumental for iTNT Hub in crafting targeted initiatives and refining its support system. The insights gained will help shape future programs, ensuring they align with the dynamic needs of the startup community.

This collaborative approach underscores iTNT Hub's commitment to driving innovation and growth, reinforcing its role as a key partner in the success of deeptech and emerging tech startups in Tamil Nadu.







Founder Stories: Focuz AR

Harnessing the power of phygital technology in sports and education

Mr. Arun Prasath the CEO & Co-Founder of Focuz AR immersed himself in developing new age technological devices for modern business challenges. After completing his B.tech in Information Technology Arun Prasath ran a successful IT services firm for 15 years and started Focuz AR a product and service company, based out of Chennai, focused on Augmented Reality, Virtual Reality, Mixed Reality and IOT based digital solutions for real-world challenges.



As a father and an entrepreneur Arun Prasath was concerned about the amount of idle time children spent on the phone screen which greatly reduced their physical activity and cognitive development. In finding a way to solve this conundrum, Focus AR was motivated to create a device that would require physical activity while cognitively engaging the user and at the same time aiding in learning and developing new skills. Focuz AR, began working with a vision to merge education with gamification.



Their Promising thought took shape into their flagship product XWall. XWall transforms any space into an active and immersive skill development environment where users are both physically and intellectually engaged.

XWall enables students, fitness and sports enthusiasts to have fun while learning, and increase their skill development. Xwall is for all age groups. Games are designed in a way that playing with a ball and body tracking improves hand eye coordination, visual motor skills, decision making, time management and cognitive and sensorial development. Xwall is packed with a list of 20+games based on skills, Education and fitness, with new exciting games released weekly. The hardest part is choosing your favourite!

Focus AR is proudly positioning XWall as the Netflix of edutainment and fitness. XWall is completely built by Focuz AR, both its hardware and software. XWall has gained popularity and presently has 15 clients in south India and are planning for business expansion and mass production. They plan on producing 3000 units in the coming year. Although investments are much needed, Focuz AR is confident in achieving this feat.





Founder Stories: Karotimam

Pioneering Green technology for a sustainable future



Creating a paradigm shift in the world of electronics and aiding a future where flexible green electronics seamlessly integrate into everyday life. Karotimam is transforming industries and consumer experiences while fostering environmental stewardship by creating eco-conscious innovations.

Dr. Chithra Lekha, the CEO of Karotimam Innovations Pvt. Ltd., is a pioneer in advanced flexible green electronic components, driven by a mission to significantly reduce the carbon footprint across industries. Dr. Chithra Lekha is a material scientist and holds a doctorate in physics. She was eager to bring a positive change in printable circuit boards (PCBs) by creating biodegradable electrical circuits boards and bio-censors.

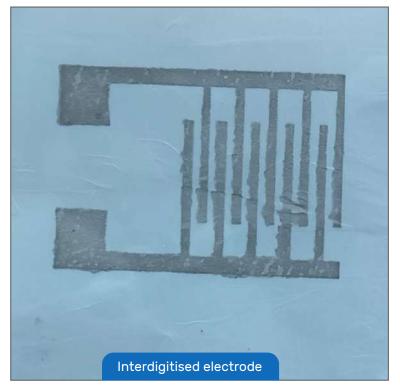
Acknowledging the severe environmental and health hazards in epoxy resin coated circuit boards, Karotimam designed and created flexible and biodegradable PCBs. Traditional rigid PCBs are being replaced by flexible ones made from substrates like bio-based polymers and nanocellulose. These PCBs can conform to irregular surfaces, enabling applications in wearables, medical devices, and robotics.

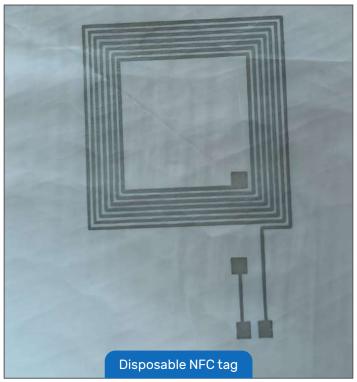
Karotimum also produces Bio-Sensors that are flexible substrates that allow for the creation of implantable and wearable biosensors that monitor vital signs, blood sugar levels, and even detect pathogens. Their conformability to skin ensures accurate readings and enhanced patient comfort.





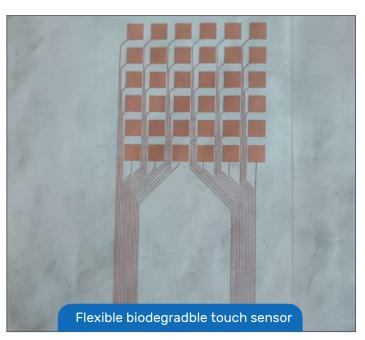






Aligned with the United Nations Sustainable Development Goals 2030, they are dedicated to tackling landfill contamination and its far-reaching consequences. In a world grappling with the undeniable environmental impact of conventional printing (PCB), our sustainable solutions stand as a beacon of hope.

Karotimam transcends being just a company; it embodies a commitment to forging a better, more sustainable future. Chithra Lekha says "Choosing our products means investing in cutting-edge technology while actively contributing to the global movement for a greener, sustainable and more responsible world".







iTNT Talks

CII Startup Summit 2024



"Collective genius is the only way we can change the world," iTNT Hub CEO Ms. Vanitha Venugopal said while delivering the special address at the inaugural of the Tamil Nadu Startup Summit 2024 organised by the Confederation of Indian Industry in Chennai on August 31. "Tamil Nadu is focusing on global collaborations through iTNT to bring world class solutions through Research & Development & Innovation. The State is also enhancing its global reach through 'International Pavilion Program' by iTNT, which connects Tamil Nadu startups with global accelerators, investors, and markets," she said.

The CEO added that, by fostering these international ties, Tamil Nadu startups gain the same global exposure and opportunities as their international counterparts. "The State's recently announced Deep Tech Policy, to be scripted by iTNT Hub, is designed to further reduce barriers, providing a conducive environment for rapid growth and scaling of startups," she said. Stating that the current initiatives position Tamil Nadu as a rising force in the global startup ecosystem, she added that by learning from successful global models and continuously enhancing its own initiatives, we are well on our way to becoming a leader in innovation.

Sathyabama Startup Fest 2024

At the Sathyabama Startup Fest 2024 hosted by Sathyabama University, prominent industry leaders, investors, and entrepreneurs gathered to celebrate innovation and foster a thriving startup ecosystem.iTNT's CEO Tmt. Vanitha Venugopal was a keynote speaker at the event and addressed the gathering on 'The growth of digital ecosystems and Startups'.

iTNT Hub CEO Ms. Vanitha Venugopal delivered the keynote address on "Growth of Digital Ecosystem and Startups" on the inaugural day of Sathyabama Startup Fest 2024 organised by Sathyabama Institute of Science and Technology at their university on August 29 & 30. "Digital Economy is characterised by speed and agility, global reach, data-driven decision-making and network effects," the CEO said and added that Tamil Nadu is among the leading states in India in terms of digital evolution and startup growth.



Gone are the years when people with decades of experience as employees and senior management personnel took the startup journey, she said and inspired the students to take up entrepreneurship. "Incubators like Sathyabama Innovation Council and iTNT innovation network for emerging and deep tech are eager to help you realise your innovation and entrepreneurial journeys through our tailored programmes across the 9 Technology Readiness Levels from ideation to commercial readiness." she added.



Deep Tech Insights

From Google to Amazon, TN turns top AI destination for global majors

Business Standard

With investments and projects coming from Google, PayPal, Applied Materials, Amazon Web Services, and many others, Tamil Nadu is fast becoming the favourite destination for artificial intelligence (AI) initiatives in India. Google is betting big on the state for long-term play in AI, as the Tamil Nadu AI Labs of the company is set to be on track soon. According to sources, the interests of these companies may even revolutionise the transportation system in Chennai as an AI-enabled one. It may link the suburban rail to buses and taxi services under one platform.



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Deep tech has widened, there are newer areas for us to build

The Economic Times

The definition of deep tech has evolved. Earlier, there were EVs, space tech, software, infrastructure, cloud, data, Al. Now, deep tech has widened. There are newer areas for us to build. Academia has become a very strong source of research ideas, leading to product startups and commercialisation. So, the time spent on academia as a source of deal flow is a critical change. Another is that great founders tend to come from R&D teams of very good tech companies—both MNCs and domestic ones. We are constantly thinking about which company we should track for talent



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Mission Rhumi 2024: Chennai students cheer as India's first reusable hybrid rocket takes off

The Hindu

Weighing about 80 kilograms and 3.5 metres tall, the single-piece Rhumi-1 rocket combines the advantages of both liquid oxidiser and solid fuel propellant systems, making it a milestone in aerospace technology, he added. The mobile launch system allows scientists to adapt to various launch scenarios with ease from any location. Explained Anand Megalingam, Founder and CEO of Space Zone India, "By introducing a reusable hybrid rocket, we are not only reducing the financial burden of space exploration but minimising its environmental impact."



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TIDCO-Tata's Rs 400 crore centre at Coimbatore Anna University to take TN on high-tech highway

DTnext

Among the projects worth Rs 51,157 crore for which the foundation stones were laid at the Tamil Nadu Investment Conclave 2024 on Wednesday, a small Rs 400 crore project arrested the attention of every onlooker. It was TN Engine (Tamil Nadu Engineering and Innovation Centre), a collaboration between TIDCO and Tata Technologies Ltd to be developed as a Common Engineering Facility Centre on the Coimbatore campus of Anna University to unlock the potential of the state and catalyse its growth in the engineering and manufacturing sector.



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Events on the Radar









Featuring Startup Hiring



Positions Vacant: 2

Role: 1) Software Developer / Intern 2) Jr. Electronics Eng. / Intern

Mobile number: +91 8110969442

Email ID:

ragul.paramasivam@chimertech.com

Apply Link



Apply Soon



Positions Vacant: 3

Role: 1) Embedded hardware/
software engineer - Vacant (2)
2) Mechanical Engineer - Vacant (1)
3) Mission Design Engineer - Vacant (2)

Mobile number: +91 8983541192

Email ID:

hello@spacetug.tech

Apply Link



Apply Soon

VEYYIL

Positions Vacant: 2

Role: ML Intern

Mobile number: +91 7904599095

Email ID:

info@veyyil.com

Apply Link



Apply Soon







Helping You Hire The Right Talents!

Emerging and Deep Tech startups in Tamil Nadu can now publish job openings (both Technical & Non-Technical) in the iTNT Monthly Digest newsletter

free of cost.

FOR MORE DETAILS, CONTACT

Mr. Daniel @ 91766 08820

office@tnthub.org

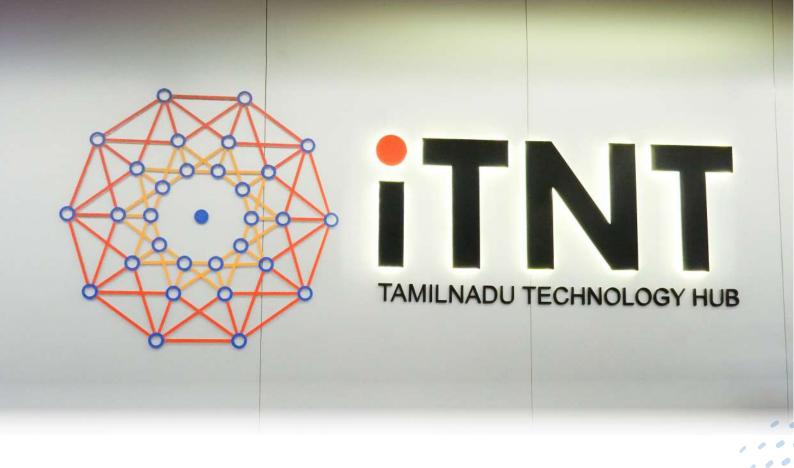
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Submit the required details by

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