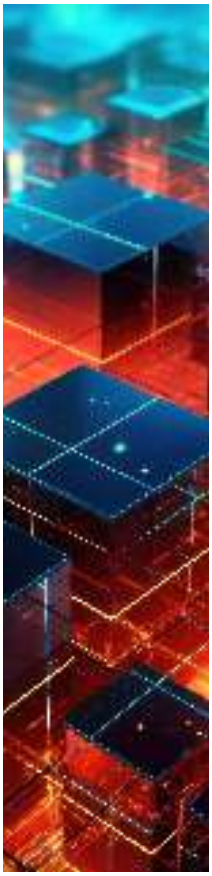
iTNT
TAMILNADU TECHNOLOGY HUB

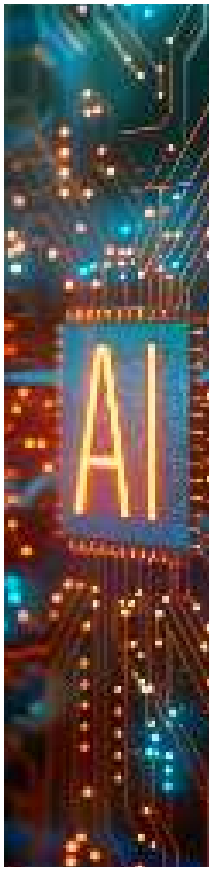
सत्यमेव जयते

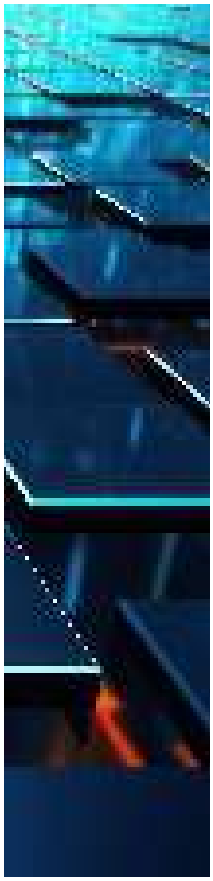
GOVERNMENT OF TAMILNADU
TRUTH ALONE TRIUMPHS

Deep Dive

June 2024







An E-Newsletter from Tamil Nadu Technology Hub

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Foreword

Dear All,

It has been an exciting June for iTNT Hub, studded with the announcement of two landmark initiatives to be spearheaded by us and the launch of exciting initiatives that will put Tamil Nadu as one of the top 10 leaders in the Global Research & Development & Innovation map. I proudly present our latest roundup, showcasing our dedication to enhancing the innovation ecosystem in Tamil Nadu.

I had the honor of presenting a book to the Hon'ble Chief Minister of Tamil Nadu, Thiru. M.K. Stalin, on June 28, 2024, in the esteemed presence of our Hon'ble Minister for Information Technology & Digital Services (IT & DS), Dr. Palanivel Thiaga Rajan, Thiru. Shiv Das Meena, I.A.S., Chief Secretary of Tamil Nadu, and Thiru. Dheeraj Kumar, I.A.S., Additional Chief Secretary to Government, IT & DS Department.

In the demand for grants session at the Tamil Nadu Assembly on June 28, 2024, the Hon'ble Minister for IT & DS, Dr. Palanivel Thiaga Rajan, made two significant announcements for execution by the iTNT Hub:
1. Formulation of the Tamil Nadu Deep Tech Policy
2. Conduct of Annual Innovate In TN IP Conclave

June also marked the successful completion of our "Break The Loop" Innovation Challenge in partnership with Rolls-Royce Data Labs, focused on tackling the heat wave. Four teams stood out and are now candidates for PATHFINDER, our flagship incubation program. The second cohort of our bootcamp featured startups and participants from various academic backgrounds working on deeptech innovations. It helped innovators and aspirants find the right product-market fit.

The year 2024-25 promises to revolutionize Tamil Nadu's innovation landscape, as iTNT Hub is excited to lead these efforts. We at iTNT remain committed to building a supportive ecosystem for deeptech and emerging tech entrepreneurs, fostering connections, and contributing to a dynamic innovation landscape in Tamil Nadu. Let's continue to inspire and innovate, pushing the boundaries of possibility and driving technological advancements. A huge thanks to my team for their dedication.

Let's Inspire and Innovate!

Best wishes,
Vanitha Venugopal
CEO, iTNT Hub

ASSEMBLY ANNOUNCEMENTS

The Hon'ble Minister for Information Technology & Digital Services Dr. Palanivel Thiaga Rajan made two announcements during the demand for grants session before the Tamil Nadu Assembly on June 28, 2024. These exciting announcements lay the foundation stone for the Government's support to strengthen the Emerging and Deep Tech landscape of the State and #BuildTheFuture as we #InnovateInTamilNadu.

FORMULATION OF "TAMIL NADU DEEP TECH POLICY"

Deep Tech & Emerging Tech, encompassing research-based breakthroughs in areas like AI, creative tech, material sciences, nanotechnology, quantum computing, etc. are the basis for leapfrogging innovations. Aimed at developing advanced technological solutions to important problems, innovation-driven startups in these areas have high potential for impact and value creation, extraordinary job creation, and revolutionizing economic growth and sustainability. To drive the utilization of advanced research-based deep tech inventions and to support deep tech startups, the Government will release a "Tamil Nadu Deep Tech Policy" this year.

Conduct of Annual

INNOVATE IN TN IP CONCLAVE

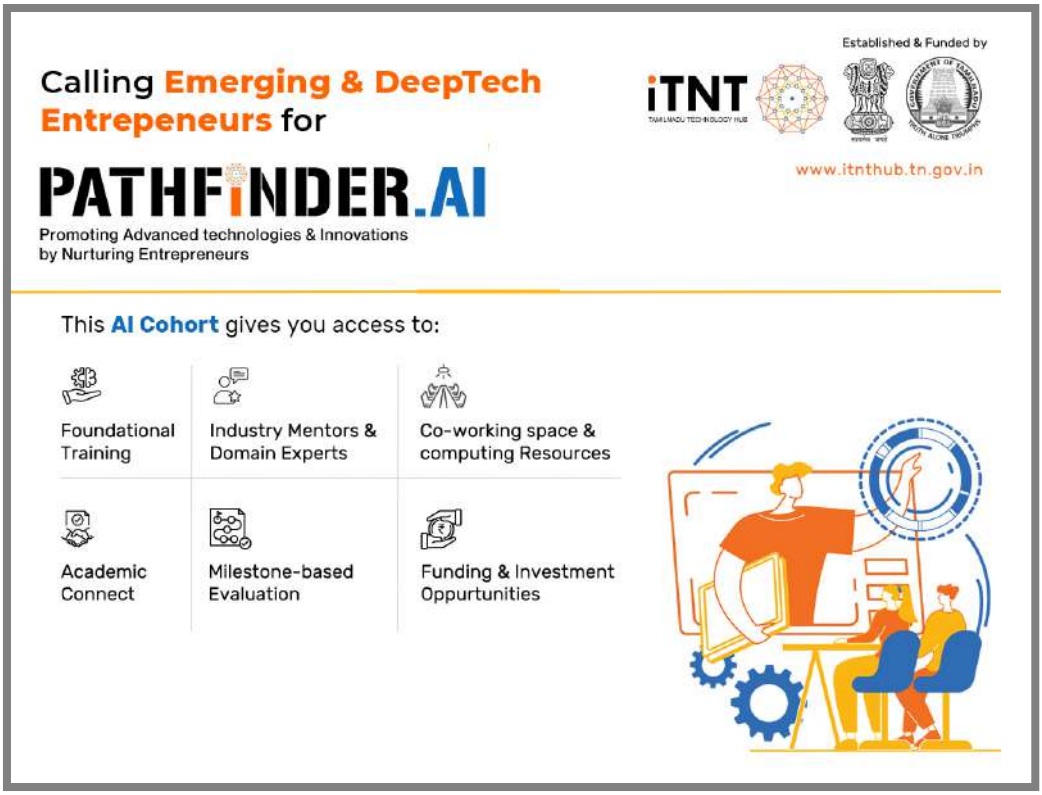
Intellectual Property is the cornerstone for Deep Tech and Emerging Tech startups. Over the last two years, Tamil Nadu has been the leader in patent filing in India with 12,948 patents, mainly driven by Deep Tech innovations. To establish the State as an IP capital, and to promote IP commercialization by facilitating technology transfers between academia, researchers, innovators, and startups & industry, the Government will organize an annual "Innovate in Tamil Nadu" (IN2TN) conclave.

WHAT'S BREWING AT ITNT HUB?

PATHFINDER LAUNCH

Promoting Advanced Technologies & Innovations by Nurturing Entrepreneurs (PATHFINDER) is an all-encompassing incubation program tailored for niche sectoral startups. It aims to support them through validation, development, and fundraising phases, offering the necessary tools, resources, and expertise to thrive in the ever-evolving innovation landscape. As a first, iTNT Hub has launched PATHFINDER.AI, an AI-focused startup cohort.

Imagine a launchpad equipped with industry expert mentorship, practical workshops, and valuable connections within the AI ecosystem. This intensive program spans 6 to 12 months and provides a comprehensive support system for your AI venture. You'll also gain access to corporates collaborating with iTNT Hub to accelerate your startup journey.



If your startup is tackling cutting-edge AI applications in areas like natural language processing, computer vision or healthcare, PATHFINDER.AI is your perfect springboard. It is laser-focused on helping you achieve key milestones. You'll validate your AI-powered Minimum Viable Product (MVP), ensuring it solves real-world problems. Refine your business model for market dominance, and gain the skills and knowledge to secure funding to scale.

APPLY NOW!

Head to the iTNT Hub website (https://itnthub.tn.gov.in/index.html) to learn more and apply. This is your chance to be at the forefront of the AI revolution in Tamil Nadu. Join us and chart your course to success with PATHFINDER.AI.

BEACON (IDEA VALIDATION BOOTCAMP) COHORT-2

iTNT Hub celebrates the successful completion of BEACON (Business Exploration & Acceleration Creation of New Ventures) Cohort 2, comprising. Thirteen teams across various sectors in deep and emerging technologies participated in the insightful bootcamp. This intensive program included workshops by industry experts covering legal requirements, product development, branding, and funding strategies.

Designed to empower participants, the bootcamp equipped them with essential tools and insights to drive innovation, foster growth, and build thriving ventures. Congratulations to all BEACON graduates as they advance to the next level of their startup journey. Stay tuned founders, co-founders, innovators, and researchers, as iTNT Hub is gearing up to launch the next BEACON cohort and propel your growth trajectory.

"BREAK THE LOOP" INNOVATION CHALLENGE

iTNT Hub and Rolls-Royce launched the "Break the Loop" innovation challenge to address the rising threat of heat waves and their societal and environmental impacts. Targeting Tamil Nadu-based DPIIT-registered startups and academic experts, the challenge focused on sustainability, energy generation, and climate tech, prioritizing patentable ideas.

The challenge received 31 applications from teams across the State and 10 teams were shortlisted after rigorous evaluation by experts from Rolls-Royce Data Labs, ProClime, Tamil Nadu Infrastructure Fund Management Corporation (TNIFMC), and others. These teams participated in two-day Technical and Business Training sessions at iTNT Hub on June 18 and 19, 2024, enhancing their business and technical skills.

The Pitch Day on June 20 featured presentations and Q&A sessions with industry leaders, including Mr. Hariharan Ganesan, VP of Data, Analytics & Reporting, and Mr. Sadashiva Bolanthur, VP – Technology & Delivery, from Rolls-Royce Data Labs, Mr. Kavin Kumar Kandasamy from ProClime, and Mr. Gana S K from TNIFMC. The participants gained visibility, mentorship, and incubation support.

The Innovation Challenge demonstrated the power of strategic partnerships in sparking transformative solutions to global issues while nurturing entrepreneurial talent in emerging technologies. The winners will be recognized for their groundbreaking solutions at the first iTNT Day celebration in Chennai on July 11. They are also getting inducted to the PATHFINDER incubation program of iTNT to realize their dreams by turning their solutions into innovative ventures.

EVENTS FROM JUNE

WEBINAR ON THE FUTURE OF BLOCKCHAIN: TRENDS AND EMERGING TECHNOLOGIES FOR STARTUPS

The webinar on "The Future of Blockchain: Trends and Emerging Technologies for Startups," by Mr. Karan Ahluwalia, Director at the CEO's Office, 5ireChain, on June 14, 2024, attracted over 100 participants including startups founders, innovators and aspirants. He introduced the fundamentals of Blockchain and DeFi, delved into Layer 1 and Layer 2 solutions like Ethereum and Polygon, and highlighted the potential of Blockchain as a Service (BaaS) for startups.

The session also explored smart contracts, asset tokenization, and NFTs, emphasizing their transformative impact on real-world applications. He underscored the need for comprehensive regulations in India and discussed consensus mechanisms, sustainability, and blockchain's evolving landscape. The speaker and his colleague also engaged and interacted with a diverse audience including Startups and Academicians.

MASTER CLASS ON NAVIGATING THE MVP LIFECYCLE FROM IDEA VALIDATION TO FULL PRODUCT LAUNCH

iTNT Hub hosted an enriching masterclass on "How to Navigate the MVP Lifecycle: From Idea Validation to Full Product Launch" by Mr. Sudharsan Srinivasan, a Doctor of Science (Tech.) and Senior Program Manager at Nokia. Mr. Sudharsan, an expert in iterative development, agile methodologies, and customer-centric approaches, shared strategies for effective idea validation and market research. He navigated through the essential stages of product development, from idea validation to full product launch. The masterclass provided practical insights into iterative development approaches for building customer-centric MVPs, best practices for leveraging user feedback, and data-driven decision-making. Participants also learned scaling techniques to transform MVPs into full-fledged products that align with customer needs, making this an invaluable session for aspiring entrepreneurs and product developers.

PILOTING ITNT HUB'S MENTOR HOURS

Embarking on a startup journey is an arduous task that requires timely guidance from seasoned mentors. Recognizing this crucial need, iTNT Hub offers a unique opportunity for emerging and deep tech startups to engage in personalized interactions with experienced mentors. This monthly initiative is meticulously crafted to provide startups with guidance essential for navigating the intricate landscape of entrepreneurship. The first monthly 'Mentor Hours' was held at iTNT Hub on June 20, 2024.

It featured three distinguished mentors who mentored startups on the pivotal aspects of startup development. Mr. Vish Viswanathan, CEO of Anikode Management Consultants, shared invaluable insights on investment and funding strategies. Mr. Kumar Sachidanandam, Co-Founder of Ydeology, provided expertise on leveraging AI and IoT for technology development. Mr. Senthil Kumar, a branding and marketing expert, offered guidance on establishing robust brand identities and effective marketing strategies.

These interactions not only equipped entrepreneurs with practical knowledge and empowered them to tackle challenges and seize opportunities on their entrepreneurial journey. Want to get mentored? Stay tuned to our social media handles to know more and block your calendars.

TECHNOLOGY TRANSFER WORKSHOP

Technology Transfer plays an impeccable role in shaping the Research, Development and Innovation landscape, especially in the Deep and Emerging Tech startup ecosystem. The Hub hosted a “Technology Transfer” workshop on June 27, 2024, by Ms. Vanishree S., Senior Business Development Executive from the Technology Transfer Office at the Indian Institute of Technology, Madras.

Ms. Vanishree delved into the fundamentals of technology transfer and its broader implications and benefits to academic researchers, industry professionals, and entrepreneurs. Technology Readiness Level (TRL) role in research, development, and deployment, highlighting the Tech Transfer Lifecycle 2022 and key organizations like AUTM, USA. The workshop examined the impact of Market Pull and Technology Push dynamics on R&D and commercialization, supported by case studies such as spider silk and Philips Lighting’s LED technology. Various licensing types were discussed, emphasizing the importance of balancing technology core (80%) and market (20%). Real-world examples like Dermis Pharma and Blubrake illustrated successful technology transfer. The session underscored the importance of effective technology transfer bridging innovation and commercialization, inspiring attendees to apply these insights to their projects.

STARTUP SHOWCASE

CHIMERTECH WINS FORT INDUSTRIAL INNOVATION & SCALE-UP GRANT!

iChimertech Private Limited, an iTNT ecosystem startup has received the prestigious FORT Industrial Innovation & Scaleup Grant from SIPCOT in partnership with Forge. This grant, presented by Dr. T.R.B. Rajaa, Minister for Industries, Investment Promotions, and Commerce, Tamil Nadu, will significantly accelerate the development of Quadmastest, an advanced diagnostic tool for the dairy industry, aims to enhance mastitis detection, improve herd health, and boost dairy productivity.

FOCUS AR'S X WALL WAS HONORED AS THE 'BEST INTERACTIVE PHYGITAL LEARNING PLATFORM' AT THE EYES SUMMIT 2024.

X Wall, a Phygital Gaming Platform For Edutainment & Fitness from Focuz AR, was bestowed with the 'Best Interactive Phygital Learning Platform' at the EYES Summit 2024, Chennai emphasizing their to transform education and entertainment through edutainment with X Wall, an interactive Phygital console with an AI camera and body tracking capabilities aimed at transforming the traditional classroom by gamifying academic subjects, making learning interactive and engaging.

FOUNDER STORIES FT. VISHNU PRIYA

THE INSPIRING JOURNEY FROM LAB TO MARKET OF KRATU INC

DeepTech Vision in Medical Textiles

Vishnu Priya, the founder of Kratu Innovations, has always been passionate about merging science with real-world applications. A doctoral graduate in microbial biotechnology, her expertise spans across Microbiology, Bioprospecting, and Metagenomics. As a DST-Inspire fellowship awardee with a keen interest in applied microbiology, her journey began in research but was destined for impactful innovation.

The Beginning

During the pandemic, widespread use of single-use protective apparel highlighted a significant issue: medical waste disposal and its contribution to carbon emissions. Vishnu Priya, deeply involved in clinical microbiology research, saw an opportunity to address this problem. She realized the need for scalable and marketable innovations. This insight led to the creation of UniClenz in 2020, a startup focused on developing reusable, sanitizable personal protective medical apparel.

Overcoming Challenges

It was just the beginning, but the journey was filled with challenges from securing patents, incorporating the startup, seeking technical consultations, and navigating legal issues. However, Vishnu Priya's determination led to significant milestones like being featured in the Samadhan Challenge and Receiving MeitY Grants for financial support provided a crucial boost, enabling the team to advance their research and development efforts. Business Mentorship guidance from NSRCEL IIM-B's Women Startup Programme helped shape the business strategy and growth trajectory. This was coupled with technical consultations and collaborations with SITRA, NIFT Tiruppur Incubation, regulatory & licensing support from Andhra Pradesh Medtech Zone, and other institutions, ensuring the product met stringent standards.

Innovation in Medical Textiles

Kratu Innovations' flagship product is zero waste, reusable, sanitizable, personal protective medical apparel. UniClenz, their fabric, is a multi-layered textile with antiviral protection that enhances breathability and sanitization. This innovation has the ability to be sanitized and reused, significantly reducing medical waste.

The product meets WHO approval standards and biosafety levels, making it a first-of-its-kind solution in the market. Their sustainable approach involves designing apparel that can be upcycled after 60 washes, aligning with global sustainability goals and enhancing the startup position in the technical textiles domain.

Global Vision

Kratu is focusing on expanding into the preventive medical textiles market, particularly in the developed nations. To meet growing demand, the dedicated team is increasing their production capacity and piloting new batches. They aim to integrate IoT for enhanced sanitization and commercialize lab research, along with Cross-border collaborations through iTNT and exploring new markets are part of their growth strategy.

Vishnu Priya highlights the challenges and rewards of innovation, especially for women. She stresses the importance of female participation at all levels to meet national economic aspirations, noting the evolving support for women in DeepTech startups

Kratu Innovations stands out with its resilience and innovation along with its commitment to sustainability, commercialization of lab research, and strong value proposition, positioning it to transform the medical textiles industry.

DEEPTECH INSIGHTS

INDIA TO SOON GET VC FUND FOR DEEPTECH STARTUPS IN DEFENSE, AEROSPACE:

AJAY KUMAR

India is set to launch a venture capital (VC) fund dedicated to deeptech startups in the defense and aerospace sectors. Spearheaded by Ajay Kumar, the former Secretary of the Ministry of Defence, this fund has already surpassed its target amount within a short period. The primary aim is to boost research and development (R&D) and intellectual property (IP) creation, supporting startups that are focused on advanced technologies such as AI, quantum computing, and blockchain.

The fund will cater to engineering-led startups and is expected to play a significant role in supporting defense forces and the defense export market. It also aims to bolster the space sector, which is poised for substantial growth, serving both civilian and defense customers.

Moreover, the Indian government plans to introduce a national deeptech startup policy, including a fund of funds to support companies in this space. This initiative indicates strong governmental backing for deeptech innovation, further enhancing the potential for startups in these critical sectors

**Source: ET Telecom.com dated June 26, 2024*

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INDIAN STARTUPS: WATERING THE SEEDS FOR INDIA TO BECOME WORLD'S DEEPTECH CAPITAL

JEYANDRAN VENUGOPAL

India's deeptech startups are addressing critical societal challenges and driving technological advancements. Notable examples include Artelus, which uses AI for accessible retinal screening, GalaxEye's multi-sensor imaging satellite for earth observation, Niramai's non-invasive breast cancer screening, and Azooka Labs' eco-friendly biotech solutions. With around 3,200 of India's 31,000 tech startups leveraging deeptech, the sector raised $2.7 billion in 2021 and is expected to contribute $450-500 billion to the economy by 2025.

However, challenges like regulatory barriers, market access issues, the need for stronger academia-industry collaboration, and a demand for specialized talent must be addressed.

Government support is essential in providing regulatory certainty, market access, and fostering talent development. As deeptech becomes more integrated into innovation, India is poised to play a significant role in this technological transformation.

**Source: moneycontrol.com, dated June 19, 2024*

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THE COUNTERINTUITIVE ADVANTAGE OF DOING HARD STARTUPS (DEEPTECH)

SHIBIL, SPECIALE INVEST (VC)

Hard startups, though challenging, offer significant rewards by tackling complex problems requiring technological breakthroughs, substantial capital, and long-term commitment. Unlike easy startups, facing market saturation and intense competition, hard startups stand out by addressing unmet needs, attracting top talent motivated by impactful ideas, and establishing defensible market positions. This approach creates a virtuous cycle of growth, as success attracts further investment, talent, and media attention.

Supportive ecosystems, like India's deeptech funding and accelerator programs, play a crucial role in nurturing these ambitious ventures. Embracing a long-term mindset is essential for prioritizing groundbreaking solutions and fostering continuous innovation. While easy startups may promise quick returns, the enduring success and potential industry disruption offered by hard startups make them a more compelling choice for entrepreneurs willing to take on risks and challenges.

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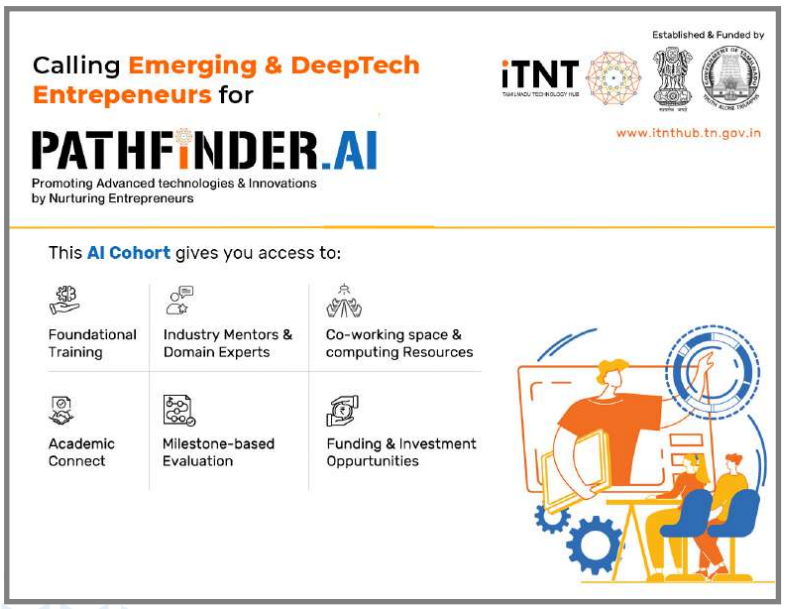
EVENTS ON THE RADAR



iTNT DAY 2024 !

FEATURING STARTUP HIRING

Connect with Us

Location: 3rd Floor, Sir C V Raman Science Block,
Anna University Campus, Kotturpuram, Chennai – 600025.

www.itnthub.tn.gov.in

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