

Government calls for Accelerated Clean Energy Action as BRE Summit 2026 Roadshow Reaches Hyderabad

Third in a nationwide series, the Hyderabad roadshow convenes clean energy stakeholders ahead of the Bharat Renewable Energy Summit & Expo (BRE Summit) 2026 from 2 to 5 November at Bharat Mandapam, New Delhi

Hyderabad, August 31, 2026: “Building on the momentum generated in

Jaipur and Mumbai, leading voices from Government, industry and the renewable energy sector gathered today in Hyderabad for the third in a series of regional roadshows for the Bharat Renewable Energy Summit & Expo (BRE Summit) 2026, India's largest renewable energy summit and expo. As India accelerates toward its target of achieving 500 GW of non-fossil fuel capacity by 2030, the Hyderabad edition brought Telangana's formidable clean en-



ergy ecosystem into the national spotlight. the Hyderabad edition brought the diverse clean energy strengths and investment opportunities of Telangana, Andhra Pradesh and Tamil Nadu into the national spotlight.

The three southern States represent important and complementary strengths in India's clean energy transition, spanning renewable energy deployment, technology, manufacturing, industrial development, infrastructure, innovation and investment. With progressive policies and a growing pipeline of clean energy projects and opportunities, Telangana, Andhra Pradesh and Tamil Nadu are well positioned to contribute to the next phase of India's renewable energy growth. Hosted by the Ministry of New and Renewable Energy (MNRE), the roadshow brought together leaders from the Governments of Telangana, Andhra Pradesh, and Tamil Nadu, the Sustainable Projects Developers Association (SPDA) and the Indian Solar Manufacturers Association (ISMA).

Bharat Renewable Energy Summit & Expo 2026 will be held alongside the 9th Session of the International Solar Alliance (ISA) Assembly and the 4th International Conference on Green Hydrogen (ICGH), bringing together global leaders, policymakers, industry, investors and innovators on a common platform.

Shri Ravi Verma, Member-Governing Council, Sustainable Projects Developers Association gave the welcome remarks and set the context for the Roadshow.

Strengthening Industry Collaboration, the Hyderabad roadshow featured a comprehensive programme aimed at driving stakeholder engagement and showcasing the strategic blueprint of BRE Summit 2026. The proceedings included the screening of two curated films, India's Renewable Energy Journey and BRE Summit & Expo 2026, capturing the nation's clean energy transition and unveiling the scale of the upcoming summit in New Delhi.

A presentation by a senior representative from MNRE outlined the strategic objectives, core themes and proposed participation framework for global and domestic players. This was followed by a dedicated session on business opportunities and commercial engagement models for OEMs, project developers and investors, alongside a live walkthrough and demonstration of the official BRE Summit digital portal and mobile application.

Shri Kamalakar Babu Merupu, VC and MD, New & Renewable Energy Development Corporation of Andhra Pradesh Ltd. (NREDCAP), highlighted Andhra Pradesh's ambitious clean energy roadmap under the Andhra Pradesh Integrated Clean Energy Policy 2024, targeting 160 GW of renewable energy additions by 2029. He outlined the State's strong investment proposition, with projects across renewable energy, storage, green hydrogen, biofuels and clean-energy manufacturing, and Renewable Energy Manufacturing Zone (REMZ), positioning Andhra Pradesh as a major destination for clean-energy investment. He also expressed the State's interest in actively participating in the Bharat Renewable Energy Summit & Expo 2026 to showcase its clean-energy opportunities and engage with investors and industry stakeholders.

Smt. B Rajeswari, Director (Finance), Tamil Nadu Green Energy Corporation Limited, highlighted Tamil Nadu's longstanding leadership in renewable energy, particularly in wind and solar, and outlined the State's plans to strengthen its integrated renewable-energy ecosystem. She emphasised the growing importance of energy storage and pumped-storage projects in integrating renewable generation and meeting peak power requirements, while also highlighting the State's efforts to create a more investor-friendly environment through streamlined and online approval processes.

Shri Musharraf Ali Faruqi, Vice Chairman and Managing Director, Telangana Renewable Energy Development Corporation Limited (TGREDCO), highlighted Telangana's growing renewable energy ambitions, supported by the Clean and Green Energy Policy 2025, which provides incentives for renewable energy generation and clean-energy manufacturing. He emphasised the State's vision of meeting its rapidly growing energy requirements through clean energy and reaffirmed Telangana's commitment to actively participate in the Bharat Renewable Energy Summit & Expo 2026, while inviting investors, manufacturers and industry to explore opportunities in the State.

Addressing the gathering at the Hyderabad Roadshow, Shri Anupam Kumar, Joint Secretary, Ministry of New and Renewable Energy (MNRE), said that India's renewable-energy story has entered a new phase, with installed non-fossil fuel capacity crossing 300 GW and the country moving towards its ambitious target of 500 GW by 2030. He emphasized that the next phase of the transition will go beyond adding renewable generation capacity and focus on building an integrated, reliable and flexible clean-energy ecosystem encompassing transmission, energy storage, manufacturing, green hydrogen, digital technologies, flexible power and demand. He noted that renewable energy is no longer only an environmental imperative, but has become central to India's energy security, economic competitiveness, industrial growth, technology development, investment and job creation. Highlighting the strengths of Telangana, Andhra Pradesh and Tamil Nadu in technology, engineering, manufacturing, research and entrepreneurship, he said the three States have the opportunity to emerge not merely as consumers of clean-energy technologies, but as producers, innovators, investors and technology partners in India's energy transition. He pointed to the growing opportunities across solar manufacturing, power electronics, battery and other storage technologies, electrolyzers, green hydrogen and its derivatives, grid technologies, digital energy-management systems, AI-based forecasting, electric mobility, bioenergy and advanced materials. He invited the three States to use the Bharat Renewable Energy Summit & Expo 2026 as a platform to showcase their renewable-energy roadmaps, investment opportunities, green-hydrogen and storage plans, industrial capabilities and innovation ecosystems to a global audience. He emphasized that BRE Summit 2026 is envisioned as a platform where policy meets capital, capital meets projects, technology meets markets, and States meet investors, with a clear focus on moving from commitments to implementation and accelerating India's clean-energy transition in line with the vision of Viksit Bharat.

Concluding the formal proceedings, Shri Amit Manohar, Secretary General, Indian Solar Manufacturers Association (ISMA), delivered the Vote of Thanks, reaffirming the solar manufacturing community's commitment to driving the summit's collaborative vision forward.

NIMS RDA Seeks Zero-Tolerance Action After Assault on Security Staff

“Hyderabad Correspondent, August 31 (Indian Chronicle): The NIMS Resident Doctors' Association (RDA) has called for immediate and stringent action following an alleged incident of abuse, threats against medical staff and physical assault on a security guard at the hospital's emergency department. According to



the RDA, the incident occurred around 12.30 am on August 31 in the Red Triage area, after a patient was brought to the emergency department in a condition with no signs of life. The doctors on duty followed the required medical procedures and there was no delay or negligence in providing care, the association said. The RDA alleged that an attendant verbally abused doctors and healthcare workers and issued threatening remarks, including claims of political influence and proximity to the Chief Minister. The person later allegedly assaulted security personnel on the first floor, leaving one of them injured. Terming the incident a serious threat to the safety of doctors, nurses and other hospital staff, the RDA sought a comprehensive inquiry, preservation and review of CCTV footage, medical documentation of the injured security personnel and appropriate police action. “It also called for strengthened 24-hour security, stricter regulation of attendant access to critical emergency areas and a Rapid Response Security Protocol to deal with incidents of violence. The association demanded a zero-tolerance approach to threats and violence against healthcare workers, stressing that medical staff must be able to work without fear, particularly while handling critical emergencies. Attempts to contact NIMS Director Rahul Devraj over the phone to seek the hospital administration's response to the incident went unanswered.

Husband Found Dead in Hotel

“MEDIPALLY, AUGUST 31 (INDIAN CHRONICLE): A man was found unconscious and later died at the Balaji Grand OYO Hotel under the Medipally police station limits. According to the police, Srinivas married Vasagoni Monica, a resident of Venkatadri Township in Ghatkesar, in a second marriage on October 27, 2024. On August 26, Srinivas left his home on his Pulsar motorcycle.”

At around midnight on August 30, police informed Monica that Srinivas was found unconscious inside the Balaji Grand OYO Hotel. Before she could reach the hotel, the staff alerted an ambulance. Medical personnel examined Srinivas and confirmed that he had died.

They suspected that he may have died due to health-related reasons. “Following Monica's complaint seeking legal action into her husband's death, Medipally police registered a case and launched an investigation.

TGCHE-TJHE Receives International Recognition

“Hyderabad, August 31 (Indian Chronicle) : The Telangana Journal of Higher Education (TJHE), published by the Telangana Council of Higher Education (TGCHE), has been allotted the Print ISSN 3139-292X, TGCHE Chairman and TJHE Editor-in-Chief Prof. V. Balakista Reddy said in a statement on Monday. The journal already has an e-ISSN 3108-0693. The ISSN International Centre has now validated its Print ISSN, making both the print and online editions of TJHE registered with the international ISSN network, he said.

Prof. Reddy said TJHE has been published as an international peer-reviewed biannual journal for the past one-and-a-half years. “[8:40 PM, 8/31/2026] +91 99661 71672: End



Thieves Create Panic at Midnight Burglary Attempt Foiled; CCTV Cameras Capture the Incident

“MEDIPALLY, AUGUST 31 (INDIAN CHRONICLE): Four suspected burglars attempted to break into houses in the BPM Greenlands Colony of Peerzadiguda, within the limits of Medipally Police Station under the Malkajgiri Commissionerate, late at night. “The suspects reportedly moved around the colony for a considerable time, keeping a watch on houses before entering one of them. Finding nothing of value, they allegedly attempted to jump over the wall into another nearby house. “A woman who noticed their suspicious movements raised an alarm, following which the suspects fled from the area. Their movements in the colony and the attempted burglary were captured on CCTV cameras. “Medipally police have registered a case and launched an investigation to identify and apprehend the suspects based on the CCTV footage. The incident has caused concern among residents, who are now worried about the movement of suspected burglars in the locality.



CM Revanth Reddy challenges KCR for a debate on the performance of the People's Government during 1000 days and 10 years of BRS rule

CM Slams KCR for confining to his farm house for the last 1000 days

“Calls to hold dharnas demanding the resignation of KCR as opposition leader from Tuesday “KCR draws Rs 1,24,44,000 salary and government spent Rs 21 crores for KCR’s security and other facilities”“The CM says he never misused power for personal gains”“Announces Tims (Alwal) and Tims (LB Nagar) will be named after former CM Anjaiah and Konda Lakshman . Warangal Super specialty names after Professor Jayashankar “KCR promoted his family members as ministers and MPs”“CM Revanth Reddy addressed a public meeting after inaugurating high level bridge at Musarambah – Amberpet today”“Hyderabad :”“Honourable Chief Minister Shri A Revanth Reddy challenged opposition leader K Chandrashekhar Rao for a debate on the performance of the People’s Government during the 1000 days and the 10 year BRS rule in the Telangana state Assembly . Further, the Chief minister called to hold dharnas demanding KCR’s resignation for confining to his farm house and not meeting people for the last 1000 days.”“Addressing a public meeting after inaugurating the bridge in the city today, the CM slammed the BRS Chief for not attending the assembly session. “ If KCR truly intends to do justice to Telangana and has any faith, teh BRS leader must attend the Assembly. I am ready for a debate in the Assembly comparing what KCR achieved in 10 years and the performance of 1,000 days of my government”. “Continuing his tirade against the BRS President , CM Revanth Reddy said that protests demanding the opposition leader's resignation must be held for six days from Tuesday. A big protest programme should be organized at Indira Park on September 6. The CM said he is ready to speak about all these issues during the Assembly session commenced on September 7. The Chief Minister ridiculed a comparison between KCR and his government. “ Is there any other opposition leader in the country who has stayed out of the public eye for 1,000 days? Telangana is a state where the main opposition has completely failed”. The BRS leaders also sold blood of the party workers by organizing blood donation camps in the party head office Telangana Bhavan, teh CM charged. “The CM also disclosed that KCR drew Rs 1.24 crore salary in 1000 days and the government also spent Rs 22 crore for the BRS leader's security and other facilities. “ If a government employee fails to report for duty for a year, they are dismissed. What should be done with KCR?”“Stating that he never misused the power, CM Revanth Reddy questioned KCR for not meeting the poor, women, students, farmers, Dalits, and Adivasis even for a single day. The BRS Chief never stepped out unless it was for his grandson's hospital visit or the death of a relative. the Chief Minister said that he has not taken a single hour of leave in 1,000 days.”“The CM accused KCR of exploiting the power to provide political opportunities to his family members. KCR made his son and son-in-law ministers in his cabinet . In the Congress government, Ponnam Prabhakar and Vakiti Srihari were elevated as ministers. Hanumantha Rao has been appointed as a government advisor and made Anil Yadav an MP. It was KCR who promoted Errabelli Dayakar as minister and he made Adluri Laxman a minister. Venkat Rami Reddy was made an MLC in the BRS government and Addanki Dayakar was given the MLC post in the People’s government. KTR was appointed as BRS working President and Mahesh Goud from the weaker sections community was appointed as the TPCC President.”“The CM announced that Tims, Alwal would be named after former CM Anjaiah and the LB Nagar Tims hospital after Konda Laxman. The Government also decided to name the Warangal super specialty hospital after Professor Jayashankar. “CM Revanth Reddy warned if anyone touched the Rajiv Gandhi statue installed at the State Secretariat. We also installed the statue of Sardar Sarvai Papanna and Mahatma Jyotiba Phule on Necklace Road. Telangana martyr Srinkatha Chary's mother Shankamma was appointed as a member of the Women's Commission and named the Women's University after Chakali Iamma and also appointed Chakali Ailamma's granddaughter as a member of the Women's Commission. “The Chief minister criticized KCR family for looting public money and constructing farm-houses spanning 1,000 acres during the BRS rule . KTR built one farm house on 100 acres, and Kavitha built on 50 acres in Janwada. The CM castigated KCR for not considering the people's issues mainly providing ration cards, which represent the dignity of the poor? We have spent ₹3,500 crore under the Chief Minister's Relief Fund . The Osmania Hospital was inundated during the floods but the KCR government did not take any measures. Our government was constructing a new Osmania Hospital at a cost of ₹2,000 crore.”“CM Revanth Reddy listed out the schemes mainly the allotment of 'Indiramma' houses in the names of women, issuing ration cards to everyone , providing six kilograms of fine-quality rice to 3.48 crore people including the BRS supporters. Did KCR ever give this any thought? We are constructing 7 lakh 'Indiramma' houses and build-



ing one lakh 'Indiramma' houses for the poor in Hyderabad, the Chief Minister said that the state government also esolved the issue of SC categorization within 1,000 days, conducted BC caste census, introduced a policy for Gig workers, new policies for sports, IT, tourism, and endowments also.

Four pilgrims from Nirmal killed as jeep overturns in Maharashtra's Nanded

Four pilgrims from Nirmal were killed and seven others injured after their jeep overturned near Thotamba village in Maharashtra's Nanded district on Monday. The victims were returning from a temple visit when the driver reportedly lost control of the vehicle.

Nirmal: In a tragic incident, four pilgrims from the district were killed on the spot, while seven sustained injuries after a jeep in which they were travelling overturned at a curve on a slope of a hillock near Thotamba village in Nanded district of Maharashtra on Monday.

Police said that Thulasiram Patel (28), the jeep driver, Thum Sailu (65), Avula Gangadhar (64) and Thum Gourubai (75), all from Pardi village in Kubheer mandal, received fatal injuries when the driver lost control of the vehicle at the curve

Seven others sustained minor injuries in the mishap. They were shifted to a hospital in Bhainsa. The condition of one of the injured was said to be critical. The driver reportedly turned off the engine and was coasting along but could not turn it on at the curve, leading to the mishap.

About 15 persons from the village were returning to Kubheer after visiting a temple in Nanded when the mishap happened. A pall of gloom descended over the village following the death of four pilgrims.

PhonePe Launches UPI Payments for India's Feature Phone Users

“Hyderabad:” PhonePe, today announced the launch of PhonePe UPI 123Pay, bringing UPI payment capabilities to feature phone users across India without the need of an internet connection. With this, PhonePe becomes the first major third-party application provider (TPAP) to extend UPI payments to India's 200 million+ feature phone users. This is a significant step toward advancing financial inclusion and bringing underserved communities into the digital payments fold. “The service will come pre-bundled on Nokia, HMD, Lava International and Itel Mobile - Transsion Holdings devices, with other handset manufacturer partnerships to follow in the coming months. The launch builds on our proprietary technology stack built specifically for UPI payments on feature phones.”

“Designed for reliability, PhonePe UPI 123Pay utilizes a robust SMS-based architecture, ensuring transactions go through even in regions with limited 2G connectivity. The platform enables seamless peer-to-peer (P2P) transfers via mobile numbers or UPI IDs, alongside peer-to-merchant (P2M) payments through UPI IDs and QR code scanning. Beyond payments, feature phone users can manage their accounts, check account balances, and view transaction histories. Upcoming updates will introduce advanced capabilities previously unavailable on feature phones, including bill payments, recharges, and Aadhaar-based onboarding onto UPI.” Speaking on the launch, Sameer Nigam, Founder and CEO, PhonePe, said, “Over the last decade, UPI has completely transformed how India pays—a journey PhonePe is proud to have built alongside it from day one. As we reflect on how far we have come, the logical next step is expanding the horizon even further and unlocking what's next. Bringing UPI to feature phones through PhonePe UPI 123Pay extends the benefits of digital payments beyond smartphones to every corner of the country. To us, this is what building for India actually means—meeting people where they are to drive a truly universal wave of financial inclusion that will onboard the next 300 million users into the digital financial fold.”



Adobe India Partners with Seven State Governments to Offer Free Access to Adobe Express and Enable Digital Creativity and AI Skills, Reaching 7.8 Million Students and Teachers Nationwide

“Hyderabad:” Adobe — the global technology leader that empowers creativity, productivity and personalized customer experiences through innovative tools and platforms — announced a strategic initiative in India partnering with state governments of Delhi, Uttar Pradesh, Uttarakhand, Goa, Assam, Bihar and Tamil Nadu to advance digital creativity and AI skills across schools. As part of Memorandums of Understanding (MoUs) signed with the states, Adobe will provide thousands of government schools with free access to Adobe Express for Education, a digital media app designed to engage students with projects that boost learning outcomes and develop future-ready skills. This initiative expands Adobe's K-12 reach in India to 7.8 million students and teachers across schools nationwide. “As part of this initiative, students and teachers will also gain access to digital creativity and AI skill-building curriculum under the aegis of Adobe Digital Academy to build proficiency in creative problem-solving, digital storytelling and AI-assisted content creation — key to advancing the National Education Policy's vision for future-ready learning. Teachers will be trained on how to integrate digital creativity into classroom teaching, while students will use Adobe

Express for school projects and creative expression, enhancing skills for future careers in India's creative and digital industries.” “Through this partnership, we're bringing classroom-ready AI tools like Adobe Express directly into schools, helping students and educators develop the creative and AI skills they need for the future of work,” said Mala Sharma, Global Vice President & General Manager, Education, Adobe. “The partnership builds on Adobe's longstanding commitment to education in India, and supports the government's National Education Policy — which emphasizes the use of digital tools and AI to help build creativity skills for future readiness — and complements the Union Budget 2026's goal of creating two million jobs in the field of Animation, Visual Effects, Gaming and Comics (AVGC) by 2030.” “The initiative extends to PM SHRI (flagship schools under India's National Education Policy), CM SHRI (state-led model schools), Kasturba Gandhi Balika Vidyalayas (KGBV), Kendriya Vidyalaya Sangathan (KVS) and other government school networks, with plans to expand to additional schools and states over time.

Between Distance and Voyage, musician Dhruv Ghanekar is at home with the world

Once celebrated for its novelty, somewhere down the line, “fusion” became a dirty word. Over the decades, it had found its utterances in jazz, which witnessed the emergence of jazz fusion, a sub-genre in the late 1960s that incorporated instruments and arrangements from rock and funk; and cuisine, where in the 1980s, in Florida, USA, a group of classically trained chefs used the term when they began creating dishes that combined Asian or Caribbean ingredients in typically European offerings; and it spread like a rash in the British-Asian and Indian music scene in the early 1980s and all through the 1990s, before remix culture took over in the early 2000s. “There was a period of time during which ‘fusion’ was a very misused word, not unlike ‘world music.’ The Grammys recently changed the name of that category to global music — which sort of summarises what I’ve been trying to do with the last two albums,” said Dhruv Ghanekar, a few days after the release of his latest album, Voyage 2 — which could also be described as fusion music. “I’m ambivalent about that term because I’m not a purist,” he added.

Now that’s one word one would never associate Ghanekar with. The 50-year composer, songwriter, and entrepreneur from Mumbai has always found ways to merge his innate talent with his growing interests. Trained in Hindustani classical music in his formative years, during which time he also found himself facing the camera, in a handful of films and shows directed by the family friend and noted filmmaker Shyam Benegal, including Katha Sagar (1986), Susman (1987) and Bharat Ek Khoj (1988). In his teens, Ghanekar began training as a guitar player, which led to the formation of his first rock band, Chakravyuh, in college in 1993. Three years later, the band would break up and Ghanekar would join forces with Ashutosh Pathak to form Smoke Music, a one-stop joint that produced over 3,000 commercials, scored music for six films, composed music for nearly every television network, music for indie artists. In 2007, they set up Blue Frog, a premier live music venue in Lower Parel, Mumbai, that gradually spread to three cities — Delhi, Bangalore, Pune — before shutting shop in 2016. Ghanekar founded Wah Wah Records in 2012 and has released Voyage and Voyage 2 under his own label. His first solo album was Distance in 2009; Voyage followed in 2015, and nine years later, Voyage 2 — it’s safe to say there’s a theme here. “These albums, especially Voyage and 2, are a culmination of so many influences. I’m as interested in Brazilian choro music as I am in ghazals from the north or Natya Sangeet from Maharashtra; my curiosity is leading the way for me,” he said. Voyage was a deft exercise in sonic mapmaking and collaboration — Ghanekar invited singer-guitarist Raul Midon, French-Cameroonian bassist/vocalist Etienne Mbatia, percussionist Trilok Gurtu and drummer Ranjit Barot, along with vocalists Ila Arun and Kalpana Patowary, to explore a variety of sounds from North and West Africa, merged with Rajasthani and Assamese folk. In Voyage 2, Ghanekar continues his cartographic journey with Arun and Patowary, who are

now joined by Nandini Srikar, Asha Sapera, Vaishali Samant, bassists Mohini Dey and Tim Lefebvre, drummer? Gino Banks, percussionist? Taufiq Qureshi, trumpet player Sam Dechenne, and rapper Ila Straight.

Imagine a sarai, a resting place where travellers gather and mingle, sharing conversation and cultures — this album sounds familiar and foreign in equal measure, and with a sound so robust that every song lends itself to a terrific live performance. “Voyage was a slightly more introspective and brooding album. We toured with it at a number of jazz festivals, which are now really genre-agnostic, and people want to be moved, they want to dance. Voyage 2 was designed in response to that: I wanted it to be fun, a joyous celebration. It will translate brilliantly on stage,” said Ghanekar. The opening track, Suprabhatam sets the tone without hesitation: Sanskrit shlokas meet drum and bass with a jangly sitar and Dey’s bass keeping time in the background. “What is interesting for me as a composer is to bring in something new to known forms, otherwise it’s just a remix. Indian regional folk is so vast and so deep, I will need several lifetimes to explore it fully. But I still want to expand my own vocabulary and conduct a deeper exploration of Indian folk melodies as seen through my unique global lens,” said Ghanekar, who returns to explore Rajasthani and Assamese folk with Arun and Patowary; this time, he’s introducing rhythms from funk, reggae, dub, electronica and rap in tracks like Bego, O Sorothia, and Jadu, respectively. Voyage 2 is also a tip of the hat to Arun (who happens to be his mother-in-law as well) — across four songs, one simply marvels at her incred-



ible range and ability to evoke different moods and take the listener on multiple sonic journeys. “She’s a one or two-take artist. She’ll give you long stretches of the song at one go, and you keep recording. Later on, I take the best parts and stitch them together, which is unlike how most recordings go these days. All the singers on the album are women, and they are so unique and in complete command of their craft and genres. Every voice on Voyage 2 is an authority on the culture she represents. So, I’m not thinking of correcting them, I can solely focus on how we can take these sounds to the next level,” said Ghanekar. Now what should anyone who finishes listening to Voyage 2 move on to next? “Oh, I know! When I was recording my first album, Distance, I was working with someone who introduced me to an Alge-

rian drummer named Karim Ziad. He has an incredible album, Ifriky (2001), which combines the music of the Berber people with jazz — it blew me away! It changed the way I thought about how I could present Indian music to the world. And then, Ziad came and played on Voyage!” After a few promotional shows in September in Mumbai and some other cities, Ghanekar will go on tour with the album at the end of the year. But he’s wasting no time to get started on his next project. What’s it gonna be? “Pop! It’s going to be a radical departure from Voyage 2, and I need to return to my singer-songwriter avatar. It’ll be sort of introspective, I’m not trying to be young. There’s a fair amount of material that I can draw from,” he said, adding, “I spent too long waiting between solo projects, and I don’t want to make that mistake again.”

How a software glitch disrupted global businesses

In the early hours (IST) of July 19, reports emerged that Microsoft’s Azure cloud service was facing an outage, affecting users in the Central U.S. area. Within the next few hours, the service outage spread like wildfire to several other countries, including India, disrupting flight operations and air traffic, forcing airports to shift to manual operations. Brokerages and stock exchanges were also hit, throwing the digital lives of many out of gear. The Indian Computer Emergency Response Team, CERT-In, has issued a severity rating of “Critical” for the incident.

Microsoft, while acknowledging the outage in a blog post noted that “Virtual Machines running Windows Client and Windows Server, running the CrowdStrike Falcon agent, may encounter a bug check”. The tech giant estimated the approximate time of impact to be as early as 4.09 a.m. UTC (9.39 a.m. IST) on July 19, when this update started rolling out. While Microsoft has not fully revealed what caused the outage on its cloud service, one incident seems to have triggered this cyber event — a glitch in the software update of CrowdStrike’s end point protection programme, Falcon Sensor. CrowdStrike is a cybersecurity firm that deploys unified security programme to stop breaches in

real time. The Falcon Sensor platform runs with high privileges and is built to protect endpoints (basically, any devices connected to a computer network). A mishap in this security platform can cause the operating system to crash, like what several users faced globally on July 19 with the Blue Screen of Death (BSOD). Once BSOD flashes on a user’s screen, they will be caught in a boot loop cycle, which simply means that they won’t be able to access their devices linked to CrowdStrike’s Falcon platform. This is because the security solution is deployed at the BIOS level.

What does BSOD mean?

BSOD is a warning that users see on their computer when the system interrupts operations and displays it on a blue screen. This is what many users saw today when they tried to access their affected devices during the outage. Officially referred to as the “Stop Error”, the warning is issued when a critical problem forces Windows to reboot. Before rebooting the system, the Windows operating system saves a file on the computer, carrying some data about the error. This file is called a ‘minidump’ and is crucial in determining the cause of the error. BSOD warnings have many causes and include problems caused by

hardware drivers, incompatible software like apps, or programs which may cause conflicts that result in BSOD. Additionally, faults in the hardware systems like RAM, hard disk drive (HDD), Solid-State Drive (SSD), motherboard, or other physical components in a system can also lead to a BSOD screen. A malware injected by threat actors could also corrupt system files in a computer, causing it to show the Blue Screen of Death. In order to fix the error screen, it is essential to find out the cause and troubleshoot the issue, based on the alphanumeric code shown in the message.

What could have caused this malfunction?

According to CyberArk’s CIO, Omer Grossman, there are range of possibilities, starting from “human error - for instance, a developer who downloaded an update without sufficient quality control - to the complex and intriguing scenario of a deep cyberattack, prepared ahead of time and involving an attacker activating a “doomsday command” or “kill switch”.

And it is anyone’s guess until CrowdStrike’s own analysis and updates are out in the coming days. Most cybersecurity experts will be keen on understanding what could have gone wrong here.

Surprising 'dark oxygen' discovery could ensnarl deep-sea mining | Explained

An unknown process is producing oxygen deep in the world's oceans, where it is too dark for photosynthesis, scientists reported on July 22 in the journal *Nature Geoscience*. The finding has important implications because oxygen helps support life and the discovery implies the existence of previously unknown ecosystems. Many governments are also bound to take notice since one explanation for the oxygen is that polymetallic nodules are transporting electric charges that split water molecules around them, releasing oxygen. Polymetallic nodules are lumps of iron, manganese hydroxides, and rock partially submerged in many parts of the ocean floor. If their concentration exceeds 10 kg per sq. m, mining them is considered to be economically feasible — and many countries are planning to do so as a new resource.

On July 22, Reuters reported an unnamed "top government scientist" saying India is planning to "apply for licences to explore for deep-sea minerals in the Pacific Ocean". India's Ministry of Earth Sciences is also currently building a submersible vehicle that will look for and mine similar resources in the Indian Ocean as part of its 'Deep Ocean Mission'. The oxygen discovery raises questions about how deep-sea mining to extract polymetallic nodules will affect marine ecosystems. The scientists behind the study, from Germany, the U.K., and the U.S., were studying the Clarion-Clipperton Zone, a part of the ocean floor off Mexico's west coast. Covering an area larger than India, the Zone is considered to have the world's highest concentration of polymetallic nodules, including 6 billion tonnes of manganese and more than 200 million tonnes each of copper and nickel.

When the scientists were conducting experiments at a depth of 4 km, they noticed the oxygen concentration in some places rapidly increased instead of decreasing. They conducted follow-up studies in 2020 and 2021. In each case, they released a device from the surface that would land on the ocean floor, where it would isolate a small volume of the floor along with some sea water and measure the oxygen levels. This underwater region is called the abyssal zone. It receives too little sunlight for photosynthesis to be feasible. Instead, life-forms here get oxygen from water carried in by a global circulation called the 'Great Conveyor Belt'. Still, the amount of oxygen is low and without any local production, the device should have measured the oxygen levels dropping as small animals consumed it. But the scientists found the opposite: it increased, sometimes tripling in just two days. They double-checked the finding by recreating the conditions on the ocean floor in their lab, and found the oxygen levels to increase up to a point before dropping.

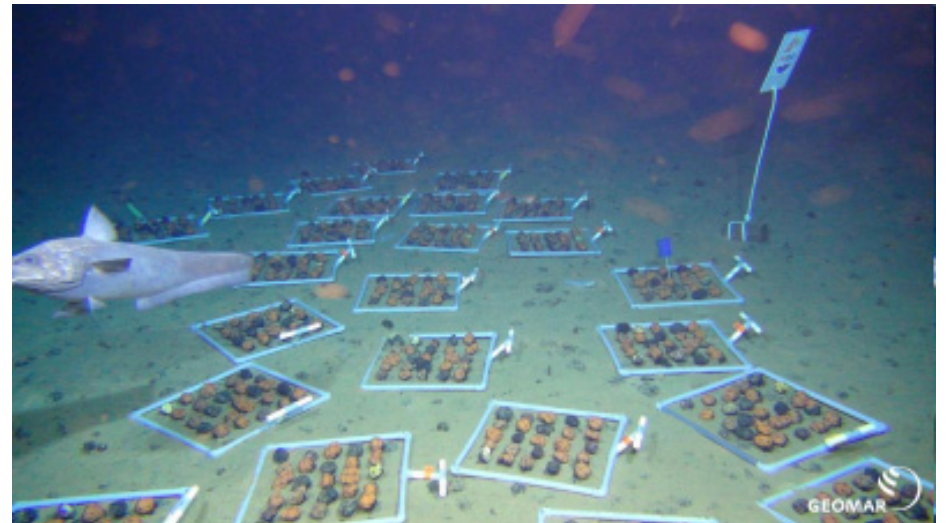
What is the source of the oxygen?

When they measured the physical characteristics of the nodules, they found their surfaces to have a voltage of up to 0.95 V. Splitting one water molecule requires 1.5 V, but the researchers have suspected the voltage could build up if many nodules are close together, like the cells of

a battery. Andrew Sweetman, an ecologist with the Scottish Association for Marine Science in the U.K. and a coauthor of the study, told *Nature*, "We have another source of oxygen on the planet, other than photosynthesis." His team is calling it 'dark oxygen'. Oxygen sources are valuable because they allow life to survive. But as the lab experiment indicated, the nodules could only produce oxygen as long as they could muster a sufficient voltage. The nodules' own energy source is also not clear.

What is deep-sea mining?

Given the quantity of metals polymetallic nodules on the ocean floor hold, deep-sea mining is expected to be a major marine resource extraction activity in the coming decades. The International Seabed Authority has established 15-year contracts with at least 22 contractors — including the Government of India — to look for polymetallic nodules, polymetallic sulphides, and cobalt-rich ferromanganese crusts in the deep seabed. China alone is expected to mine 17% of the Clarion-Clipperton Zone. The new finding raises the possibility of such mining damaging ecosystems that require 'dark oxygen' to survive. Experts have found deep-sea mining itself could be harmful to the marine environment, 'dark oxygen' or not. In 1989-1996, scientists from Germany conducted the Disturbance and Recolonisation (DISCOL) Experiment in the Peru Basin as the world's "first large-scale impact assessment" to assess the "environmental impacts originating from the mining of polymetallic nodules". They built a device that disturbed the sea floor like a deep-sea mining exer-



cise might have and collected data about how the disturbances changed local oceanographic and sedimentological profiles, among other things. A 2019 study in the journal *Scientific Reports* reported that "the effects of simulated mining impacts induced during the DISCOL [Experiment] were still evident in the megabenthos of the Peru Basin after 26 years."

How will deep-sea mining be affected? The same study also reported "significantly lower heterogeneity diversity in disturbed areas" and added that "if the results of this experiment ... can be extrapolated to the Clarion-Clipperton Zone, the impacts of polymetallic nodule mining there may be greater than expected, and could potentially lead to an irreversible loss of some ecosystem functions". In November

2023, *Nature* reported based on a paper published then that deep-sea mining "for minerals could harm deep-sea jellyfish, according to the first study of mining impacts on animals living in the water column." Scientists also know less about ecosystems in the abyssal zone than they do about many of those aboveground, which means the models scientists use to predict their fate and their role in global climate processes could be unreliable. With these and other issues in mind, on July 20, three major European insurance companies said they would exclude deep-sea mining from their underwriting portfolios. 'Dark oxygen' adds to these challenges. If deep-sea mining doesn't find sustainable ways to respond to them, it may be rendered altogether infeasible.

WazirX crypto exchange hack and its bounty programme: what it means to India's crypto investors?

On July 18, Indian cryptocurrency exchange WazirX was hit by a cyberattack that led to a loss of digital assets worth more than \$230 million from one of its wallets. The exchange responded by pausing normal trading activities and reported the incident to the Indian authorities and other crypto exchanges. The company also launched two bounty programmes aimed at ethical hackers who can help the exchange track, freeze and recover the stolen funds. WazirX said there was a cyberattack against a multi-signature wallet it managed through a digital asset custody service known as Liminal. Multi-signature wallets have a built-in security feature that requires several parties to sign off on transactions.

"The impact of the over \$230M cyberattack is on the digital assets of our customers," said WazirX in a blog post, adding that INR funds were not affected. The company strongly denied that WazirX itself was breached, and brushed aside rumours that it was duped by a phishing attack. The exchange also noted that it was "certain" that its hardware keys were not compromised, adding that an external forensic team would be engaged to further investigate the matter. But Liminal, after

completing investigations at its end, said "It is evident that the genesis of this hack stems from three compromised devices at WazirX's end." Meanwhile, WazirX founder and CEO Nischal Shetty said that the attack was only possible if there had been four points of failure in the digital signing process.

Who is behind the hack?

WazirX has not yet revealed the suspected parties or perpetrators responsible for the hack. However, news reports have emerged that North Korean hackers were responsible for the incident. On-chain analysis and other information indicate "that this hack was perpetrated by hackers affiliated with North Korea," said blockchain analytics platform Elliptic. In response to The Hindu's queries to WazirX about the North Korean hackers, the crypto exchange WazirX directed us to its blog and said it was working with law enforcement officials to see if any known threat group might be behind the attack. "This incident has affected the Ethereum multisig wallet, which consists of ETH and ERC20 tokens. Other blockchain funds are unaffected," said WazirX in its official blog, specifying that approximately 45% (as per preliminary workings) of crypto assets were affected

by the attack. The company has largely shifted the blame to the process of securing multisig Ethereum wallets, and claimed the vulnerability was not unique to WazirX.

How important is WazirX in the crypto sector?

WazirX calls itself India's largest cryptocurrency exchange by volume. As of June 10, it reported total holdings of ₹24,203.88 Crores, or USDT 503.64 Million. Tether [USDT] is a stablecoin, or a cryptocurrency that is pegged to the value of the U.S. Dollar but is not an official U.S. currency. When The Hindu tried to access WazirX's public and real-time proof of reserves after the cyberattack, we were welcomed by the page was under maintenance notice. WazirX has received both positive and negative press in India. The Directorate of Enforcement froze the exchange's assets in 2022, lambasting its operating procedures and loose Know-Your-Customer (KYC) and Anti-Money Laundering (AML) norms.

"By encouraging obscurity and having lax AML norms, it has actively assisted around 16 accused fintech companies in laundering the proceeds of crime using the crypto route.

The science of tirzepatide, touted as a game-changing weight loss drug

The national drug regulation body, Central Drugs Standard Control Organisation (CDSCO), has reportedly authorised the use of the drug, tirzepatide, for treatment of diabetes. The use of tirzepatide for chronic weight management is still under review. The drug is being sold by the pharma company Eli Lilly under the brand names Mounjaro (for diabetes) and Zepbound (for obesity).

What causes obesity and diabetes?

When we eat, we are stocking up on glucose, a molecule that is fundamental for our cells to function. Glucose is so crucial that our bodies evolved a mechanism to store it when food is available in plenty. The excess stock is stored in the form of lipid droplets that can be converted back to glucose at times when food is scarce. This is where the hormone insulin comes into play, explained Anil Gaikwad, a pharmacologist at Central Drug Research Institute, Lucknow. "Insulin secretion is a signal to cells to mop up excess glucose from the bloodstream. As long as the normal feeding and fasting cycles are maintained, our cells are functionally responsive to insulin." The trouble is when cells develop insulin resistance. With the Industrial Revolution, cheap quality food became easy to access. This, coupled with our sedentary lifestyles, has resulted in an imbalance between our energy intake and usage. This is likely why there is an obesity epidemic in the world — according to the World Obesity Federation Atlas, 11% of Indian adults will be obese by 2035. In such conditions, there is an oversupply of glucose in the bloodstream and the body is forced to maintain high levels of insulin to control the situation. Beyond a point, cells become desensitised to the insulin, a scenario known as insulin resistance. "With insulin resistance, there is an increased pressure on the beta cells of the pancreas to produce more insulin. This vicious cycle exhausts the beta cells, eventually leading to its death," said Gaikwad. This is the process that underlies the transition of a person from being insulin-resistant to prediabetic. "When approximately 40% of the beta cells are exhausted and unable to produce the required quantity of insulin, a person is declared diabetic," he added.

How can the new drugs help

The active component of the two Eli Lilly drugs Mounjaro and Zepbound is called tirzepatide. Tirzepatide is delivered subcutaneously via an injection given weekly. It works by acting as a 'dual agonist'. This means that it can mimic two naturally occurring molecules: gastric inhibitory polypeptide (GIP) and glucagon-like peptide-1 (GLP-1). "GIP and GLP-1 are peptides that are released following ingestion of fats and/or carbohydrates. They stimulate the release of insulin, and help increase insulin sensitivity in adipose and skeletal tissue," said RNV Krishna Deepak, a computational structural biologist at Azim Premji University, Bengaluru. Being an agonist of these two peptides, tirzepatide can activate the same pathways as them.

Deepak added that GIP and GLP-1 (and therefore tirzepatide, their synthetic analogue), also have other physiological effects including slowing gastric emptying

and promoting satiety. "The patient feels fuller for longer and in turn eats less, resulting in weight loss," he says. This is how tirzepatide helps those with insulin resistance, a group that includes obese and diabetic individuals.

What sets tirzepatide apart? Tirzepatide is not the only drug to use this strategy to combat diabetes and obesity. Semaglutide, marketed by the company Novo Nordisk, is also a GLP-1 agonist. This drug is already available in India for diabetes management. Like tirzepatide, semaglutide is also effective for weight loss, but in a higher dose (known by its brand name Ozempic). However, its usage for obesity has not yet been approved in India. The edge that tirzepatide has over semaglutide is its property as a dual agonist; not only does it activate the GLP-1 receptor, it also activates the GIP receptor. Interestingly, there may already be a newer drug that goes one step further than tirzepatide in the offing. Called retatrutide, this works as a 'triple agonist', meaning it targets a third receptor, GCGR, besides the GIP and GLP-1 receptors. Studies show that retatrutide may be a better alternative to semaglutide and tirzepatide, but it has some way to go before being approved by a regulatory authority.

Is tirzepatide a silver bullet?

No. "Tirzepatide has received marketing authorisation for type-2 diabetes mellitus in India as an adjunct to diet and exer-



cise to improve glycemic control in adults with type-2 diabetes," clarified a spokesperson for Eli Lilly. "Diet, exercise and lifestyle modification are the cornerstone of type-2 diabetes management and any active drug indicated for type-2 diabetes is an add-on to diet and lifestyle." So far, the most common side effects of taking tirzepatide seem to be nausea and vomiting. It is also important to know that the medications once launched are unlikely to be affordable to most Indians. When asked about affordability, the spokesperson commented: "We believe tirzepatide will be competitively and appro-

priately priced based on the efficacy of the medicine and overall lower risk-benefit ratio as observed in phase 3 clinical trials." While they declined to mention any specifics, a Business Insider report has said that it is likely to be priced at ₹20,000 for each weekly dose. Nandita Jayaraj is the co-author of Lab Hopping:

A Journey to Find India's Women in Science, which explores the gender gap in Indian science. The views expressed are personal. Catch every big hit, every wicket with Crickit, a one stop destination for Live Scores, Match Stats, Infographics & much more. Explore now!

Prince Harry sent 'congratulate note' to Kate Middleton to convey how happy he was to....

Prince Harry had connected with his estranged sister-in-law, Kate Middleton, following the Princess of Wales' appearance at Wimbledon Tennis Championships on July 14 amid her ongoing cancer treatment, as per a new report. The Duke, who was previously known for his strong bond with Kate, has been in the limelight over straining ties with the Royal family since he stepped down of the Royal duties and moved to the US with Meghan Markle. Kate, 42, received a standing ovation at the yearly grand slam as she appeared in the ground four months after making her cancer diagnosis public. Harry sends congratulate note to Kate Middleton. According to Heat Magazine, the Duke of Sussex reached out to Meghan and congratulated her on attending the tournament. "Harry was watching Wimbledon and was thrilled to see Kate looking so radiant," a source told the magazine.

Harry sent a "congratulate" note to Kate to tell her "how happy he was to see her out." "He's just so grateful that she's on the mend and able to get back to her duties after taking time off — as is Meghan," the source added. Royal fans were delighted when Kate arrived at the All England Lawn Tennis Club, with daughter Princess Charlotte and sister Pippa Middleton. The Princess of Wales "showed



Prince Harry had connected with his estranged sister-in-law, Kate Middleton, following her appearance at Wimbledon Tennis Championships on July 14.'

a lot of courage and character, as she knew that the world was watching," stated renowned royal chronicler Robert Jobson. Meanwhile, the Palace insider confirmed his remarks, informing the outlet that she most certainly received "sustenance" from her outing. Kate says 'Great to be back' at Wimbledon. Following her Wimbledon outing, Kate shared her happiness at re-

turning to SW19 on XGreat to be back at @Wimbledon! There's nothing quite like The Championships," she wrote. It is being reported that the Waleses will spend the balmy summer at Anmer Hall, which is situated on the Sandringham estate in Norfolk, England. Later on, Kate and William and their three kids will meet the King and Queen Camilla at Balmoral Castle.

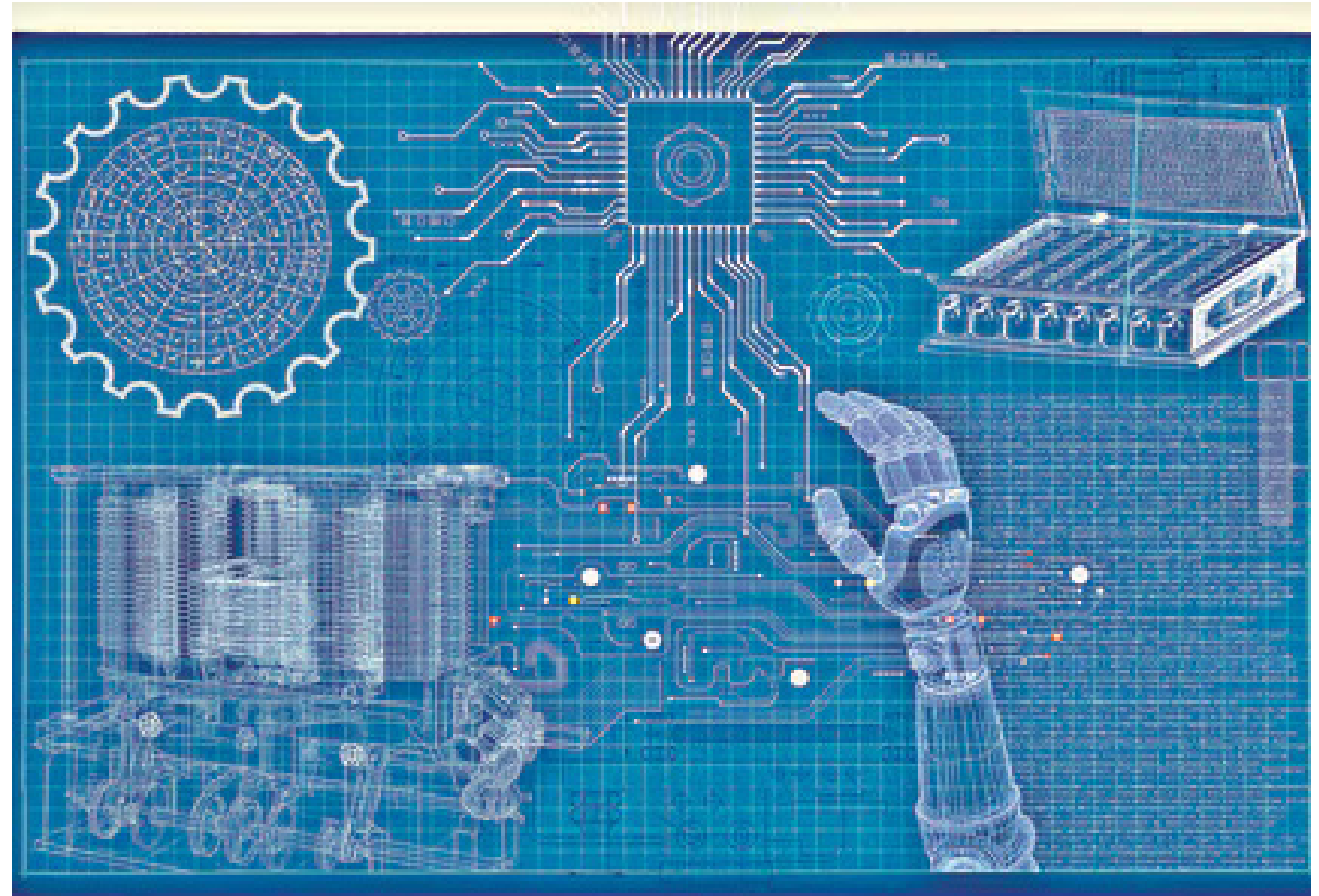
We've been trying to chat with machines for centuries. See what came before AI

All those years ago, an Arabic astrology wheel was built in an early attempt at automated chat. Then, in 17th-century Europe, a "mathematical cabinet" was built in an attempt to automate poetry, music and coded messages. There was an American robot in the 1930s designed to spit out story ideas for Hollywood. Spell checks, text messaging and autocorrect would follow.

It's an intriguing journey that Dennis Yi Tenen, a scholar and software engineer, traces in his new book, *Literary Theory for Robots: How Computers Learned to Write*. His aim, he says, is to take some of the fear and confusion away from how we view this technology, and offer a reminder that humans have always woven threads of language and technology together, driven by a primal urge to protect and promote intelligence and knowledge. "Language and technology didn't just develop together; language is technology," says Yi Tenen, an associate professor of English and comparative literature at Columbia University. "While many animals teach things to their young, only humans are able to do it remotely, for instance, preserving and transmitting our collective know-how across time and space." Can we go too far in this quest? "Of course we can. I find it difficult to use technology in a balanced way in my own life," Yi Tenen says. With AI, of course, the struggle isn't quite the same. It is, potentially, a struggle over the nature of reality, veracity, truth.

Which is why it is even more vital to view this technology accurately and dispassionately as a product of human endeavour, Yi Tenen says, and not as something that is a being by itself. If we view it as an extension of our collective intelligence, we can hold technology makers responsible and accountable, he adds. His book, accordingly, takes a step back, into the historical context of AI. How far back can we trace our efforts to create "intelligent" machines? Take a look.

This device, created in Arabia, was a maze of concentric circles and elaborate charts that bore zodiac signs, letters, symbols and numerical values. Cords zig-zagged across the whole. A manual or rulebook of sorts helped soothsayers interpret the readings, particularly in matters of astrology. What's interesting, though, is that some of the circles contained verses from the Quran and other holy texts, "and in manipulating the circles, one could actually kind of have a conversation with the device," Yi Tenen says. "The fact that we're still in Q&A mode with ChatGPT... I thought that was such a cool parallel." The earliest literary bots were shaped like giant cupboards, and operated like a sort of word loom. One of the earliest examples is the Mathematical Organ created by 17th-century polymath Athanasius Kircher. Made of painted wood, this was a box-style chest made up of rows and columns of wooden slats or rods. Attached to each were paper booklets on subjects such as arithmetic, music, geometry, chronology and astrology. In a spooky foreshadowing, Kircher called them "applications". Manipulating these rods and consulting the booklets, which were ar-



ranged in a matrix, could help the user compose poetry and music (of a sort), write encrypted messages, and work out certain kinds of mathematical and astronomical calculations. Kircher sold a version of the device to the young Archduke Charles Joseph of Austria to help with his studies. It sparked several debates, including a public one at a bar between Kircher and the German poet Quirinus Kuhlmann. The latter argued that the path to knowledge should be "torturous, accessible only to those willing to walk it properly". It wasn't the organ that was intelligent, the poet added; the intelligence lay with Kircher. "Without the box, the young duke remains an idiotic parrot." Essentially, an early instance of the argument that computers are making us lazy and stupid. The Analytical Engine, 1830s It was Kircher's Mathematical Organ that inspired the English mathematician Charles Babbage to create what would go down in history as the world's first computer, in the 1830s. Babbage called it the Analytical Engine, and developed its functions in collaboration with the countess and mathematician Ada Lovelace.

It eventually looked like a weaver's loom. The machine — only partly built by Babbage in his lifetime — had a mill (like the central processing unit), store (like memory storage), reader (input device) and printer (output device). The mill could process calculations with the help of punch cards inserted into the reader. The Thirty-Six Dramatic Situations, 1895 By the 19th century, amid the early years of the industrial revolution, templates were emerging: for furniture, machinery, clothing, equipment, and for the arts (literature, film, mu-

sic), journalism, even philosophy. In the arts, templates have always been looked down upon as a poor substitute for missing genius. But, Yi Tenen argues, they have always lain at the heart of how we learn. Could a machine, then, help a not-so-great writer write a great tale? Long before ChatGPT, an outline generator was created by the French writer Georges Polti, in 1895. Titled *The Thirty-Six Dramatic Situations*, it listed three dozen predicaments designed to help a struggling playwright. These included supplication, deliverance, vengeance, pursuit, disaster, revolt, rivalry and adultery. Each was explained briefly with examples. For instance, pursuit came with the instructions that the plot should be "held by the fugitive alone; sometimes innocent, always excusable, for the fault — if there was one — appears to be inevitable, ordained; we do not inquire into it or blame it, which would be idle, but sympathetically suffer the consequences with our hero, who whatever he may once have been, is now but a fellow-man in danger". Combining elements from his set of dramatic situations,

hundreds of thousands of stories could take shape. Though rarely acknowledged, such templates were frequently used by writers well into the age of cinema, Yi Tenen says. This machine, built by Los Angeles screenwriter Wycliffe Hill, could produce a complete outline of a story in 20 minutes, its whirring gears drawing background, characters and dramatic situations from a series of tapes housed in its chassis. The robot found no takers (it is unclear why, but expense may have been a factor; it is also possible that the stories weren't very good). But it prompted Hill to write a book titled *Plot Genie* (1935), about a wheel that could be spun to point to seemingly random numbers, which could be referenced against a set of charts, to generate plot requisites (locale, character, the beloved, the problem, and so on). As it turns out, Hill wasn't a polymath or early technocrat. He was a scriptwriter who became fixated on decoding the intricacies of what makes a good plot, when his own screenplay was rejected. His aim was to take the effort and uncertainty out of writing.

AFA former and present commandants get medals

Hyderabad: Air Marshal (ret'd) B Chandra Sekhar, former Commandant of the Air Force Academy (AFA) in Hyderabad, received the Param Vishisht Seva Medal. Additionally, current AFA Commandant, Air Marshal S Shrinivas has been honoured with the Ati Vishisht Seva Medal for his exceptional services to the

Indian Air Force (IAF), a press release said. On Friday, President Droupadi Murmu conferred 94 Distinguished Service Decorations to the personnel of the Armed Forces and the Indian Coast Guard during the Defence Investiture Ceremony (Phase-2) at Rashtrapati Bhawan, New Delhi.