

ATHARVA ROBOTICS CENTER

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NASA Astronaut Jonny Kim, Axiom Mission 4 Commander Peggy Whitson Conduct Research in Space

By Monika Luabeya, July 23, 2025

In this photo from June 28, 2025, Expedition 73 flight engineer Jonny Kim and former NASA astronaut and director of human spaceflight at Axiom Space Peggy Whitson work together inside the International Space Station's Destiny laboratory module setting up hardware for cancer research.



Nuclear-powered cooling tech drives Sam Altman-backed Oklo's AI efficiency push

By Atharva Gosavi, July 23, 2025

Oklo, a nuclear technology company, has joined hands with Vertiv, a global leader in digital infrastructure, to develop an advanced power and cooling technology for hyperscale and colocation data centers.



Chinese Firm Unveils World's First Humanoid Robot Capable Of Changing Own Battery

By Srishti Singh Sisodia, July 23, 2025

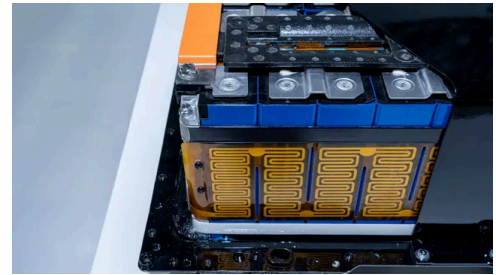
A Chinese firm has launched a humanoid robot that can change its own battery, allowing it to run autonomously for 24 hours in seven days without human intervention. The world's first autonomous robot, Walker S2, has been developed by UBTECH Robotics.



[EV battery printing breakthrough could double life while retaining 81.5% charge](#)

By Aman Tripathi, July 23, 2025

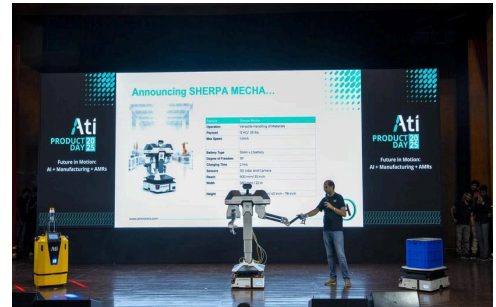
A South Korean research team has developed a novel printing technology that more than doubles the stability of next-generation lithium-metal batteries.



[India enters humanoid robotics race with Sherpa Mecha as China surges ahead](#)

By Abhijeet Kumar, July 23, 2025

At its Product Day 2025 event, Indian robotics startup Ati Motors unveiled what could mark a pivotal moment for India's deep-tech sector — the debut of Sherpa Mecha, a humanoid-inspired robot engineered for industrial deployment.



[New Wi-Fi fingerprint tech tracks your body without device, phone, or camera](#)

By Aamir Khollam, July 23, 2025

Surveillance in the digital age is no longer limited to cameras and smartphones. From facial recognition to GPS logs, the tools used to monitor people have grown increasingly sophisticated.



[US supercomputer trains AI on 53 million nuclear docs for faster plant approvals](#)

By Atharva Gosavi, July 23, 2025

The Oak Ridge National Laboratory (ORNL), headed by the Department of Energy, have penned a memorandum of understanding with AI company Atomic Canyon to refine the licensing process for nuclear power plants.



News Articles

Be the Energy SAIviour



**STEP UP TO
THE PLATE**



Amitabh Kant

As AI continues its march, the demand for energy-intensive AI processing is skyrocketing. India, with its abundant RE resources and burgeoning AI ecosystem, is well-positioned to become a global leader in green energy-powered AI processing.

AI computing needs large-scale data centres, or hyperscale data centres. These require reliable green power at a scale and speed. Global data centre energy requirements are projected to reach 4,000 TWh by 2030, accounting for 5% of global electricity demand. Estimates suggest that training a single AI model can consume up to 284,000 kWh.

Renewable power plants have the shortest commissioning timelines due to their modular nature. India has set ambitious RE targets, aiming to generate 50% of its electricity from non-fossil fuels by 2030. With over 300 days of sunshine per year and generous wind speeds, India has immense solar energy potential, which can be harnessed to power AI processing.

India's true strength lies in local green energy champions, who have the capacity to implement world-class projects. The renewables industry is backed by a modern single national grid and a dynamic regulatory framework. India's AI ecosystem is growing rapidly, with over 1,000 AI startups. Moreover, 20% of global AI talent resides in India, making it an attractive location for AI companies. The AI market size in India is expected to reach \$7.8 bn by 2025, driven by increasing demand for digital services,

ecommerce and cloud computing.

India's data centre market is growing rapidly, driven by increasing demand for digital services, ecommerce and cloud computing. According to a report by MarketsandMarkets, the Indian data centre market is expected to reach 1,432 MW of installed capacity by 2025, growing at a CAGR of 21.1%. By 2030, the market is projected to reach 3,243 MW of installed capacity, with a



Lean, mean, green machine

growth rate of 15.6%.

The needs of a data centre are distinct from other infrastructure projects. They are designed and built for the highest standards of reliability, modularity, redundancy and security. The ability of the data centre to provide backup power with redundancy is also critical for its success.

Even though diesel generators are the dominant backup technology for data centres, green technologies such as batteries (6-hour backup) and hydrogen fuel cells (48-hour backup) are increasingly being explored to reduce carbon intensity. With water being a significant barrier to the expansion of hyperscale data centres, intelligent integration with technologies such as fuel cells that produce water as a

by-product could be an interesting proposition.

Google's AI-powered data centre in Hyderabad is powered by 100% RE, setting a precedent for sustainable AI processing. Microsoft's AI-powered data centre in Pune uses solar power for primary energy needs, further demonstrating the potential for green energy-powered AI processing. The Make in India initiative encourages the development of green data centres and AI infrastructure, providing a supportive policy framework for the growth of this sector.

To ensure success in the AI data centre sector, India should promote a net-zero hyperscale data centre policy, aiming to position itself as the world's most sustainable data centre destination. The country should aim to unlock a significant number of carefully selected sites that can provide 24x7 green power with appropriate green backup power options.

Additionally, India should nurture skilled talent capable of building cutting-edge data centres with high levels of autonomy and security. Innovations for efficient configuration of data centres that minimise energy and water requirements should be promoted through publicly funded pilots. Finally, India should build global trust in the integrity of data protection on Indian soil with appropriate policy, regulatory and outreach initiatives.

India's clean energy strengths and growing AI ecosystem make it an ideal location to become a world leader in green energy-powered AI processing. By leveraging its RE strengths and addressing the challenges of AI data centres proactively, India can reduce its carbon footprint, enhance its reputation as a hub for sustainable business and innovation, and drive economic growth and job creation in the clean energy and AI sectors.

The writer is former G20 sherpa, GoI

Tantris Munich

Fifty years ago, Fritz Eichbauer, the founder of a Munich-based construction company, was so enamoured with French fine dining that he'd make regular pilgrimages to Alsace — because Munich had nothing that came close. Tired of the culinary commute, he decided to change that. In 1971, he transformed a former nightclub into Tantris. Today, his son Felix carries forward his vision.

Tantris is a playground for the palate. Begin with the house-baked baguette — crisp, warm and the perfect prelude. The duck foie gras with rhubarb vinaigrette is a standout opener. Then comes the showstopper: a glistening layer of Petrossian oscietra caviar hiding lemon-zesty mullet and ginger, with raw mushrooms keeping things delightfully fresh.

But the real star might be the confit salmon trout encased in



brioche. For meat lovers, the venison loin with cherries and a grand veneur sauce — slow-simmered over 48 hrs and finished with bitter chocolate and cognac — is majestic. Even the vegetarian and pescatarian alternatives are anything but an afterthought. And only a braveheart could forget the strawberry dessert — a playful composition of Bavarian strawberries in various forms, including ice cream and sorbet.

Source: The Economic Times Newspaper, 24-07-2025

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Link: <https://drive.google.com/file/d/1hAa-KuYNXVvIYDMOncRu-gepXatG-OX/view>

AI must aid human thought, not become its replacement

Watching the recent resurgence of violence in Kashmir, I find myself grappling with questions about the role of technology, particularly Generative Artificial Intelligence (GenAI), in warfare. India is built upon the philosophy of live and let live, yet that doesn't mean passively accepting aggression. As someone deeply invested in responsibly applying AI in critical industries like financial services, aerospace, semiconductors, and manufacturing, I am acutely aware of the unsettling dual-use potential of the tools we develop: The same technology driving efficiency and innovation can also be weaponised for harm.

We stand at a critical juncture. GenAI is rapidly shifting from mere technological advancement to a profound geopolitical tool. The stark division between nations possessing advanced GenAI capabilities and those dependent on externally developed systems poses serious strategic risks. Predominantly shaped by the interests and biases of major AI-developing nations, primarily the US and China, these models inevitably propagate their creators' narratives, often undermining global objectivity.

Consider the inherent biases documented in AI models like OpenAI's GPT series or China's Deepseek, which subtly yet powerfully reflect geopolitical views. Research indicates these models minimise criticism of their home nations, embedding biases that can exacerbate international tensions. China's AI approach, for instance, often reinforces national policy stances, inadvertently legitimising territorial disputes or delegitimising sovereign entities, complicating fragile diplomatic relationships, notably in sensitive regions like Kashmir.

Historically, mutually assured destruction (MAD) relied on nuclear deterrence. Today's arms race, however, is digital and equally significant in its potential to reshape global stability. We must urgently reconsider this outdated framework. Instead of mutually assured destruction, I advocate for a new kind of MAD: mutual advancement through digitisation. This paradigm shifts the emphasis from destructive competition to collaborative development and technological self-reliance.

This evolved MAD requires nations, particularly technologically-vulnerable developing countries, to establish independent, culturally

informed AI stacks. Such autonomy would reflect local histories, cultures, and political nuances, making these nations less susceptible to external manipulation. Robust, culturally informed AI not only protects against misinformation but fosters genuine global dialogue, contributing to a balanced, multipolar AI landscape.

At the core of geopolitical tensions lies a profound challenge of mutual understanding. The world's dominant AI models, primarily trained in English and Chinese, leave multilingual and culturally diverse nations like India, with its 22 official languages and hundreds of dialects, in a precarious position. A simplistic AI incapable of capturing nuanced linguistic subtleties risks generating misunderstandings with severe diplomatic repercussions. To prevent this, developing sophisticated, culturally aware AI models is paramount. Multilingual AI systems must leverage similarities among related languages such as Marathi and Gujarati or Tamil and Kannada to rapidly scale without losing depth or nuance. Such culturally adept systems, sensitive to idiomatic expressions and contextual subtleties, significantly enhance cross-cultural understanding, reducing the risk of conflict driven by miscommunication.

As GenAI becomes integrated into societal infrastructure and decision-making processes, it will inevitably reshape human roles. While automation holds tremendous promise for efficiency, delegating judgment, especially in life and death contexts like warfare, to AI systems raises profound concerns. I am reminded of the Cold War incident in 1983 when Soviet Lieutenant Colonel Stanislav Petrov trusted human intuition over technological alarms, averting nuclear disaster — a poignant reminder of why critical human judgment must never be relinquished to machines entirely.

My greatest fear remains starkly clear: A future where humans willingly delegate judgment and thought to algorithms. We should not accept this future. We share collective responsibility as innovators, technologists, and global citizens, to demand and ensure that AI serves human wisdom rather than replaces it. Let's commit today: never allow technology to automate away our humanity.



Arun
Subramaniyan

Arun Subramaniyan is founder and CEO, Articul8. The views expressed are personal.

Source: The Hindustan Times Newspaper, 24-07-2025
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Link: https://drive.google.com/file/d/1PurJGUDicYnleqtYnd144pRm_JZJseu2/view

AI, drone-based land surveys, satellite imagery becoming part of governance: President Murmu

STATESMAN NEWS SERVICE
NEW DELHI, 23 JULY

President Droupadi Murmu on Wednesday met the probationers of the Indian Defence Estates Service, Military Engineer Services and Central Water Engineering Service at Rashtrapati Bhavan here.

Addressing the Indian Defence Estates Service officers, the President said in this era of rapid technological transformation, the integration of digital solutions is a necessity. It is their duty to stay abreast of the technological advancements and apply them in their functioning.

She said Artificial Intelligence (AI), drone-based land surveys, satellite imagery, and blockchain for property record maintenance are no longer futuristic concepts, they are becoming part of governance.



The president advised them to embrace green practices in infrastructure development, adopt renewable energy solutions, reduce wastage, and ensure water conservation in cantonments.

Addressing the Military Engineer Services officers, Murmu said as emerging leaders in the field of military construction, young MES officers have a crucial responsibility

not only to build but to build with responsibility.

She said they should focus on the adoption of renewable energy sources to promote sustainable development and reduce carbon footprint of defense infrastructure.

The President expressed her joy to note that MES is actively promoting the use of indigenous materials and technologies under the 'Make in India' initiative

aligning with the national vision of *Atmanirbhar Bharat*.

Addressing the Central Water Engineering Service officers, Murmu said sustainable development of water resources and efficient management of water is key to water security and growth, especially in the wake of changing climatic trends.

By providing clean water and promoting water conservation, India can improve public health, boost agricultural productivity, and ensure sustainable use of natural resources, the President said.

She underlined that the contribution of Central Water Engineering Service officers towards water infrastructure development, by providing engineering solutions, will make the country more resilient against natural and man-made water crises.

Source: The Statesman Newspaper, 24-07-2025

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