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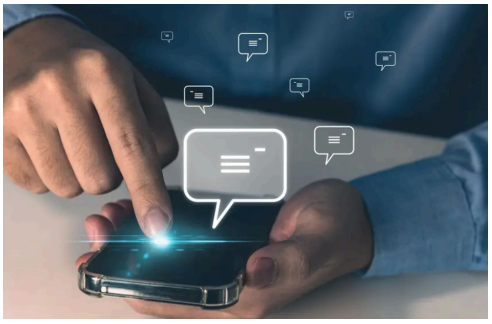
Daily News on Innovation & Technology

8th December 2025

Skin-like device makes texting without screens possible, turns taps into readable messages

By Bojan Stojkovski , December 6, 2025



Human skin can sense subtle patterns of pressure, timing, and movement, but most digital devices only register simple taps and swipes. This difference has led researchers to explore new touch-based technologies. They have tested sensor-filled gloves, wearable bands that track small pressure changes, and thin surfaces that create precise vibrations

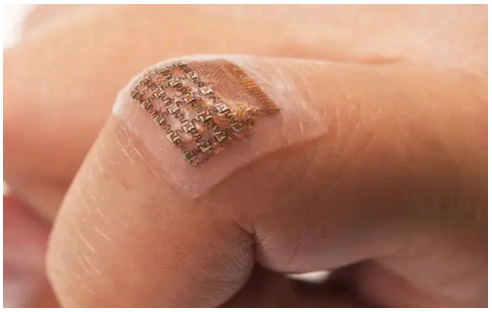
With one small step for AI, Chinese scientists make giant leap for humanity

By Zhang Tong, December 7, 2025

Imagine a robot that could tie your shoelaces to the perfect degree of tightness, or a robotic hand capable of performing abdominal surgery and then suturing the wound with impeccable precision.

Just iron it: Liquid-metal patches turn any fabric into wearable electronics

By Aamir Khollam, December 5, 2025

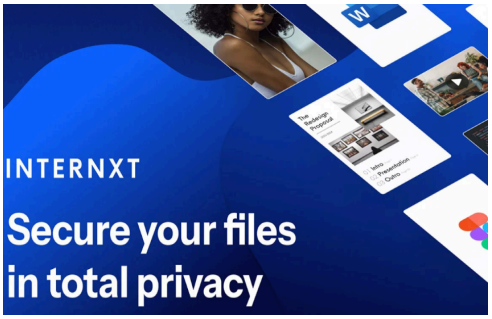


Researchers have developed a new iron-on electronic patch that could make wearable technology easier to apply and customize.The patch uses liquid metal combined with a heat-activated adhesive and bonds to fabric with a standard household iron. Early demonstrations showed that the technology can power LEDs and even support a working microphone integrated into clothing.

100TB of cloud space means no more stressing about digital storage

By Sponsored by StackCommerce, December 5, 2025

If you've ever found yourself deleting photos, moving files to random hard drives, or upgrading another monthly cloud plan just to keep things running, you already understand the quiet stress of running out of digital space.



Unitree's Big Humanoid Robots Are Fighting Now

By Jesse Orrall, December 7, 2025

Chinese robotics company Unitree has revealed its much larger humanoid robot, the H2, can fight. We dig into all the hidden details in the company's latest demo videos. Click to unmute Pause Unmute Current Time 0:19 Duration 6:04 Captions Share Fullscreen New video from Unitree shows their nearly 6-foot humanoid robot throwing punches, kicks, knees and literally breaking pieces off of the company's much smaller G1 humanoid.

China's Pudu Robotics debuts four-legged robot 'D5'

By South China Morning Post , December 8, 2025

Pudu Robotics has unveiled its new four-legged robot, the D5, at the International Robot Exhibition (IREX) in Tokyo. Based in Shenzhen, Pudu Robotics develops service robots for sectors such as food delivery, cleaning, and logistics.

Light from satellites will ruin majority of some space telescope images, study says

By Chandelis Duster, December 7, 2025

Reflections cast by a growing number of satellites orbiting the Earth could ruin more than 95% of images taken by some space telescopes in the next decade, according to a NASA-led study.

UAE aims to produces 60trillion AI Tokens

By TOI, World Desk, December 7, 2025

The United Arab Emirates is aiming to redefine global AI. landscape by planning to produce a staggering 60 trillion AI at its Stargate AI campus in Abu Dhabi.

News Articles

IIT-B steps into future with BharatGen, its own AI firm

India's 1st Attempt At An AI System For Its Languages & Culture

Sonali Chhapia
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Mumbai: Indian Institute of Technology Bombay, long seen as a launchpad for India's brightest startups, has quietly crossed an even more telling milestone. It incorporated a company of its own. This is not an incubated spinoff or a faculty-seeded venture, but an organisation owned and anchored by IIT Bombay itself.

On Nov 7, BharatGen Technology Foundation was registered with the Registrar of Companies in Mumbai, carrying the Powai institution's address as its owns—an unmistakable signal of how India's top engineering school plans to shape the future of artificial intelligence. BharatGen, the country's first attempt to build a Large Language Model that mirrors India's linguistic, cultural, and social diversity, first took shape last year after the Department of Science and Technology (DST) laid the groundwork with Rs 235 crore in initial support, signalling an early bet on public infrastructure for AI. The project is supported under the DST's National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS). Led by IIT Bombay, the BharatGen consortium brings together several leading institutions, including IIT Madras, IIT Kanpur, IIIT Hyderabad, IIT Mandi, IIIT Hyderabad, IIM Indore, IIT Kharagpur, and IIIT Delhi.

Taking the models from lab to market requires corporate autonomy as opposed to being just an academic project, said an IIT-B professor

"To take the models from the lab to market requires the functional freedom and autonomy of a corporation as opposed to being just an academic project," said Prof Ganesh Ramakrishnan, IIT Bombay's professor who is the founder director of BharatGen Technology Foundation Designed to work across more than 22 Indian languages, BharatGen combines text, speech, and document vision, so AI can interpret information the way citizens naturally speak, read, or interact. BharatGen's ambition is not just to build large language models, but to build ones that sound and think like India. Its strength, said Prof Ramakrishna, lies in training systems on home-grown datasets and Indian languages—an approach he believes will make them far more dependable in real-world use.

He added that the foundation plans to release distilled versions of its models to developers, allowing startups and enterprises to plug into sovereign AI without the cost or expertise of training colossal systems on their own. In other words, he said, BharatGen will do the heavy lifting so the country's innovators can get straight to building.

The initiative has now received an additional Rs 1,058 crore from MeitY under the IndiaAI Mission, expanding BharatGen into a national sovereign AI effort.

Source:Times of India, 8-12-2025
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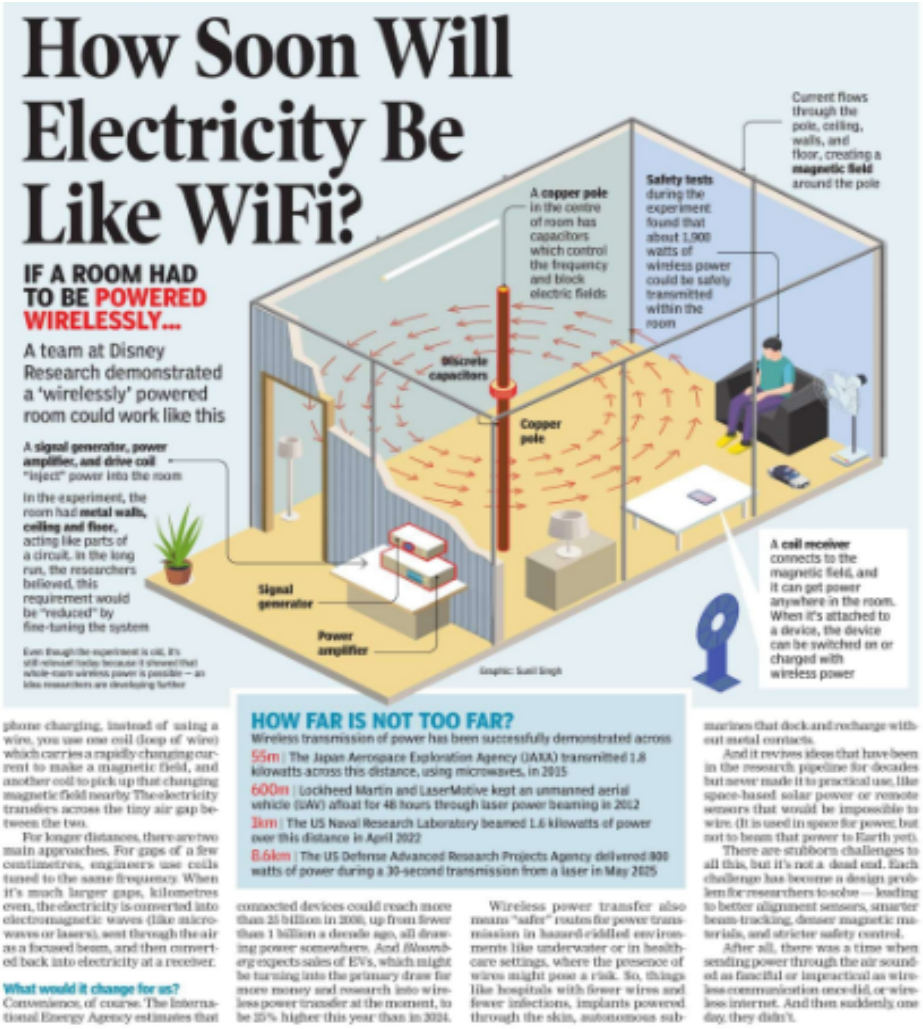

How Soon Will Electricity Be Like WiFi?

IF A ROOM HAD TO BE POWERED WIRELESSLY...

A team at Disney Research demonstrated a 'wirelessly' powered room could work like this

A signal generator, power amplifier, and drive coil "inject" power into the room

In the experiment, the room had **metal walls, ceiling and floor,** acting like parts of a circuit. In the long run, the researchers believed, this requirement would be "reduced" by fine-tuning the system

Even though the experiment is old, it's still relevant today because it showed that whole-room wireless power is possible — an idea researchers are developing further

A copper pole in the centre of room has capacitors which control the frequency and block electric fields

Safety tests during the experiment found that about 1,900 watts of wireless power could be safely transmitted within the room

Current flows through the pole, ceiling, walls, and floor, creating a **magnetic field** around the pole

Discrete capacitors

Copper pole

Signal generator

Power amplifier

A coil receiver connects to the magnetic field, and it can get power anywhere in the room. When it's attached to a device, the device can be switched on or charged with wireless power

Graphic: Sunil Singh

HOW FAR IS NOT TOO FAR?

Wireless transmission of power has been successfully demonstrated across

55m | The Japan Aerospace Exploration Agency (JAXA) transmitted 1.8 kilowatts across this distance, using microwaves, in 2015

600m | Lockheed Martin and LaserMotive kept an unmanned aerial vehicle (UAV) afloat for 48 hours through laser power beaming in 2012

1km | The US Naval Research Laboratory beamed 1.6 kilowatts of power over this distance in April 2022

8.6km | The US Defense Advanced Research Projects Agency delivered 800 watts of power during a 30-second transmission from a laser in May 2025

phone charging, instead of using a wire, you use one coil (loop of wire) which carries a rapidly changing current to make a magnetic field, and another coil to pick up that changing magnetic field nearby. The electricity transfers across the tiny air gap between the two.

For longer distances, there are two main approaches. For gaps of a few centimetres, engineers use coils tuned to the same frequency. When it's much larger gaps, kilometres even, the electricity is converted into electromagnetic waves (like microwaves or lasers), sent through the air as a focused beam, and then converted back into electricity at a receiver.

What would it change for us?

Convenience, of course. The International Energy Agency estimates that connected devices could reach more than 25 billion in 2030, up from fewer than 1 billion a decade ago, all drawing power somewhere. And Bloomberg expects sales of EVs, which might be turning into the primary draw for more money and research into wireless power transfer at the moment, to be 25% higher this year than in 2024.

Wireless power transfer also means "safer" routes for power transmission in hazard-riddled environments like underwater or in healthcare settings, where the presence of wires might pose a risk. So, things like hospitals with fewer wires and fewer infections, implants powered through the skin, autonomous submarines that dock and recharge without metal contacts.

And it revives ideas that have been in the research pipeline for decades but never made it to practical use, like space-based solar power or remote sensors that would be impossible to wire. (It is used in space for power, but not to beam that power to Earth yet).

There are stubborn challenges to all this, but it's not a dead end. Each challenge has become a design problem for researchers to solve — leading to better alignment sensors, smarter beam-tracking, denser magnetic materials, and stricter safety control.

After all, there was a time when sending power through the air sounded as fanciful or impractical as wireless communication once did, or wireless internet. And then suddenly, one day, they didn't.

Source:Financial Express Newspaper, 08-12-2025
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