

## **ATHARVA ROBOTICS CENTER**

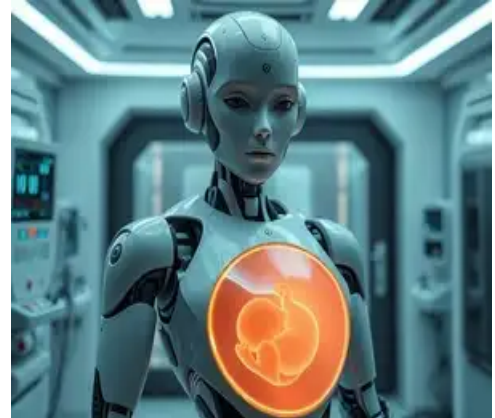
### **Daily News on Innovation & Technology**

19<sup>th</sup> August, 2025

#### **China's Kaiwa Technology develops pregnancy humanoid robot with artificial womb technology**

By Don Tomslee, August 18, 2025

Pregnancy humanoid robot features embedded artificial womb system. The humanoid robot incorporates an artificial womb embedded in its abdomen, designed to carry a fetus through gestation and deliver a baby. The technology aims to provide pregnancy alternatives for individuals seeking to avoid biological gestation burdens.



#### **'Indian on moon in 2040': Union minister lays out India's space ambitions**

By Shivam Pratap Singh, August 18, 2025

Jitendra Singh was speaking in the Lok Sabha during a discussion on Group Captain Shubhanshu Shukla's mission to the International Space Station (ISS). Union minister Jitendra Singh on Monday laid out India's space plans for the next 15 years, culminating with an Indian astronaut setting foot on the moon. "India will set up its own Bharat Antariksh Station in 2035 and in 2040, an Indian astronaut will set foot on the moon," Singh said.



#### **Microsoft Windows Vulnerability Exploited to Deploy PipeMagic RansomExx Malware**

By Ravie Lakshmanan, August 18, 2025

Cybersecurity researchers have lifted the lid on the threat actors' exploitation of a now-patched security flaw in Microsoft Windows to deploy the PipeMagic malware in RansomExx ransomware attacks.



## [Hong Kong to unleash mosquito-killing robot dogs to combat Chikungunya virus](#)

By Atharva Gosavi, August 18, 2025

Authorities in Hong Kong are gearing up to embrace cutting-edge technology to curb rising cases of the mosquito-borne Chikungunya virus in the region. After health officials recorded nine imported cases of Chikungunya fever this year, the city plans to deploy robot dogs equipped with insecticide sprayers to tackle the menace



## [New detection system promises early warnings to help spacecraft dodge orbital debris](#)

By Aamir Kholam, August 18, 2025

Space debris has become one of the biggest challenges for space agencies and satellite operators. Thousands of fragments orbit Earth, left behind by collisions, missile tests, and malfunctioning spacecraft. Even tiny shards travel at extreme speeds and can puncture satellites or damage instruments. With more companies launching satellites every year, the risk continues to grow.



## [Wheel-legged robotic system moves more efficiently in a wide range of environments](#)

By Ingrid Fadelli, August 18, 2025

Most existing robots designed to move on the ground rely on either wheels or legs, as opposed to a combination of the two. Yet robots that can seamlessly switch between wheeled and legged locomotion could be highly advantageous, as they could move more efficiently on a wider range of terrains, which could in turn contribute to the successful completion of missions.



## [IBM to support quantum computing initiative in Maharashtra](#)

By Communications Today, August 19, 2025

Global tech giant IBM on Wednesday said it will support Maharashtra in developing its quantum computing initiative. The US-headquartered company having a presence in the western state also signed a letter of intent with the Maharashtra government to identify opportunities of support for the state's quantum initiatives, as per a statement. IBM will offer expertise, which Maharashtra may use to help craft its own quantum initiative, and also contribute to the development of the state's quantum ecosystem through workshops and other skills development efforts.



## News Articles

ARAVIND PUTREVU

The emergence of generative AI and the use of advanced large language models (LLMs) have sparked a deep division concerning future white-collar occupations. In India, a country where the size and the growth of white-collar employees are large and escalating every year, this discussion attains greater importance. As India is currently in a situation of being transformed by changing technology, it is important to factor in how generative AI may affect the traditional white-collar jobs.

White-collar work usually involves work in management, delegation, strategic planning, program management, project management, analysis, and so on, which in turn do not involve hand work but intellectual work. These jobs are traditionally shielded against automation because of their complexity and necessary traveling, decision making, and dynamic solutions. Nevertheless, due to the innovations of generative AI, various white-collar fields remain unprocessed yet can be subjected to automation at least to some extent.

It is paramount to mention that in cases where a clear context and specific prompts are given, generative AI will be excellent at performing specific yet clear tasks. The strengths of these AI systems are their high-level of data processing, pattern detection, the automation of workflows, and high-efficiency levels of repeated operations. Nevertheless, they rely to an extent on human monitoring and planning to achieve results that are meaningful, accurate, and ethically viable.

The best example is the case of program management. The size of large-scale projects used to be supported by a great number of people engaged in logistical monitoring, work design, task delegation, and regular check-ins. These process-heavy areas can be reduced considerably now that generative AI has entered the sphere.

However, along with the aforementioned efficiencies, the strategic nature of program management cannot be replaced with AI. Human ingenuity and emotional intelligence is required when handling strategic planning, critical decision making, risk assessment, and team relationship management. Hence, the role of project or program managers could not be done away with so much in the new workplace, but it could be redefined. Rather than a big pool of coordinators, the organisations may favour smaller and more strategic roles such as project strategists or AI supervisors who can manage and direct the AI-driven processes.

Likewise, there are changes in jobs such as business analysts. In the past, business analysts were engaging much of their time in data collection, cleansing, and preparation procedures in order to be analysed. Modern analytics platforms using generative AI are able to fully analyse data, generate initial insights, and elaborate reports in real time. It enables analysts



## Will generative AI replace white-collar work in India?

to focus on more serious interpretation, strategy suggestions and stakeholder-related work involving creativity and an understanding of situations that is currently beyond the limits of AI.

Generative AI models are transforming work in finance and trading. Monotonous activities like examination of past market performance, forecasting, and risk assessment are some of the activities that can be automated easily. Nevertheless, subtle judgmental decisions, compliance aspects, ethical approach towards decision making, and personalised financial advice are squarely the expertise of human beings.

There are also drastic changes in

the retail industry. AI can now take care of inventory management, customer service, market analysis, and even early-stage customer interactions. Accuracy and consistency are also increased through this automation besides reducing the speed of delivering the service. However, human intervention will always be essential to cover loopholes, have a heart-felt connection with customers, and in adopting general business strategies in expanding the business.

The true generative capability of generative AI, however, will not be in the direct replacement of white-collar tasks but in their redefinition and upgrading. Allowing human

professionals to concentrate on more high-value work, which needs more profound analytical abilities, strategic flexibility, and emotional sophistication, is possible by automation of routine, repetitive, and predictable work. Those organisations that have imbibed this paradigm shift in the quickest time will have leaner, more strategic, and very effective work forces.

Nevertheless, major challenges have to be taken into consideration. In the case of India, a nation undergoing a fast rate of digitalisation, which at the same time faces employment issues, it is crucial to manage this technological change very closely. There should be close cooperation between policymakers, industry

leaders, and education institutions in assuring a balanced transition.

To sum up, generative AI is unlikely to replace the traditional white-collar job duties completely but is bound to change them considerably. The existence of white-collar workers with good prospects is waiting to be availed in India in the case that active initiatives are contributed in education, training, and policy formulation, coinciding with the implementation of the technology. The councils of generative AI in white-collar work are not only the context of automation, but of a calculated transformation.

THE WRITER IS THE DIRECTOR OF DEVELOPER MARKETING, COIMBATUR

Source: The Statesman, 19-08-2025

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Link: <https://epaper.financialexpress.com/4046222/Mumbai/AUGUST-18-2025#page/10/2>

## Hijacked satellites, orbiting space weapons: Space is the new battlefield

Washington: As Russia held its Victory Day parade this year, hackers backing Kremlin hijacked an orbiting satellite that provides television service to Ukraine. Instead of normal programming, Ukrainian viewers saw parade footage beamed in from Moscow; waves of tanks, soldiers and weaponry. The message was meant to intimidate, and it was an illustration that 21st century war is waged not just on land, sea and air but also in cyberspace and the reaches of outer space.

Disabling a satellite could deal a devastating blow without a single bullet, and it can be done by targeting the satellite's security software or disrupting its ability to send or receive signals from Earth.

"If you can impede a satellite's ability to communicate,

you can cause a significant disruption," said Tom Pace, CEO of NetRise, a cybersecurity firm. He served in the US marines before working on cyber issues at department of energy. "Think about GPS. Imagine if a population lost that... the confusion it will cause," he said.

### A short-term challenge

More than 12,000 operating satellites now orbit the planet, playing a critical role not just in broadcast communications but in military operations, navigation systems like GPS, intelligence gathering and economic supply chains. They are also key to early launch detection efforts, which can warn of approaching missiles.

That makes them a significant national security vulnerability and a prime target for



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anyone looking to undermine an adversary's economy or military readiness — or to deliver a psychological blow like the hackers supporting Russia did when they hijacked television signals to Ukraine.

Hackers typically look for the weakest link in the software or hardware that supports a

satellite or controls its communications with Earth. The actual orbiting device may be secure, but if it has outdated software, it can be exploited.

National security officials say Russia is developing a nuclear, space-based weapon designed to take out virtually every satellite in low-Earth or-

bit at once. The weapon would combine a physical attack that would ripple outward, destroying more satellites, while the nuclear component is used to fry their electronics.

US officials declassified information about the weapon after Rep. Mike Turner issued a warning about the technology. Turner has pushed for department of defence to provide a classified briefing to lawmakers on the weapon, which, if deployed, would violate an international treaty prohibiting weapons of mass destruction in space. Russia and China also would lose satellites, though they are believed to be less reliant on the same kinds of satellites as the US.

**Mining the moon and beyond**  
Valuable minerals and other

materials found on the moon and in asteroids could lead to future conflicts as nations look to exploit new technologies and energy sources.

Acting Nasa administrator Sean Duffy has announced plans to send a small nuclear reactor to the moon, saying it's important that the US do so before China or Russia.

The moon is rich in helium 3, which scientists believe could be used in nuclear fusion to generate huge amounts of energy. While that tech is decades away, control over the moon in the intervening years could determine which countries emerge superpowers, said cybersecurity expert Joseph Rooke. China and Russia have announced plans for their own nuclear plants on the moon in coming years. *AP*

Source: The Times Of India Newspaper, 19-08-2025

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