

ATHARVA ROBOTICS CENTER

Daily News on Innovation & Technology

08th July, 2025

Dhruva Space to integrate solar panel on Pixxel's hyperspectral satellites

By India Today Science Desk, July 07, 2025

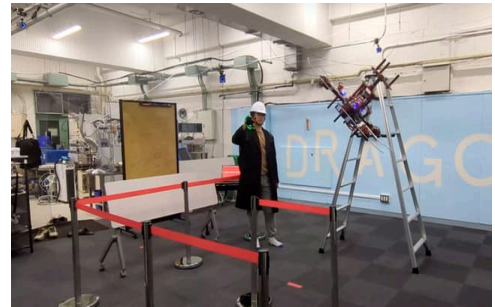
In a significant advancement for India's burgeoning private space sector, Dhruva Space, an engineering solutions company is set to integrate its space-grade solar panels into Pixxel's next satellite fleet.



Japan's sci-fi glove steers drones with hand gestures in high-precision teleoperation

By Jijo Malayil, July 07, 2025

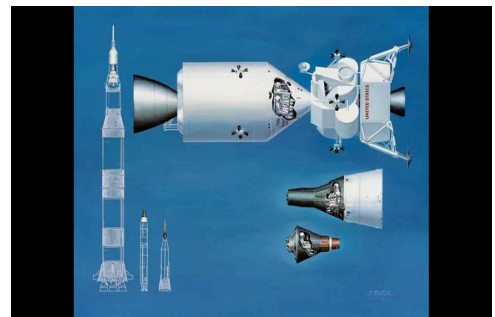
Researchers at the University of Tokyo's Dragon Lab have developed an intuitive hand-based teleoperation system that allows human operators to control omnidirectional aerial robots with high precision.



ChatGPT could pilot a spacecraft unexpectedly well, early tests find

By Paul Sutter, July 07, 2025

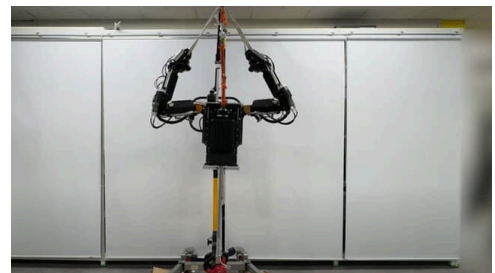
This is the first prompt researchers used to see how well ChatGPT could pilot a spacecraft. To their amazement, the large language model (LLM) performed admirably, coming in second place in an autonomous spacecraft simulation competition.



Korea's humanoid robot nails pull-ups with 44-pound weight strapped on

By Christopher McFadden, July 07, 2025

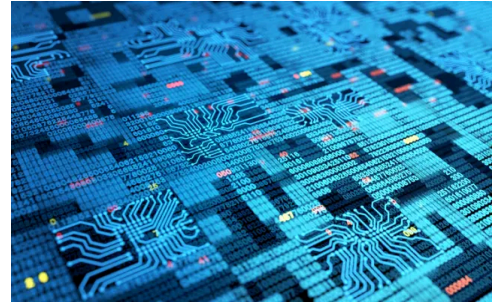
The Korea Atomic Energy Research Institute (KAERI) has dropped a new video showcasing the remarkable strength of its headline robot, the ARMstrong Dex.



[New memristor-based system by Chinese scientists boosts AI data sorting efficiency](#)

By Bojan Stojkovski, July 06, 2025

In a bid to overcome shortcomings in scientific computing, Chinese scientists have unveiled a new approach to sorting data that promises both higher speed and lower energy consumption.



[AI robots fill in for weed killers and farm hands](#)

By Glenn CHAPMAN, July 06, 2025

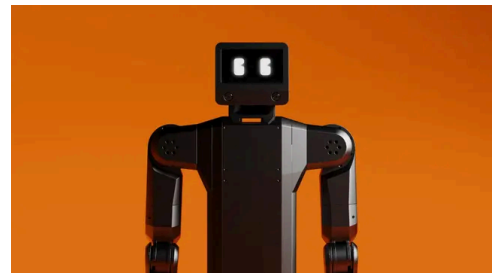
Oblivious to the punishing midday heat, a wheeled robot powered by the sun and infused with artificial intelligence carefully combs a cotton field in California, plucking out weeds.



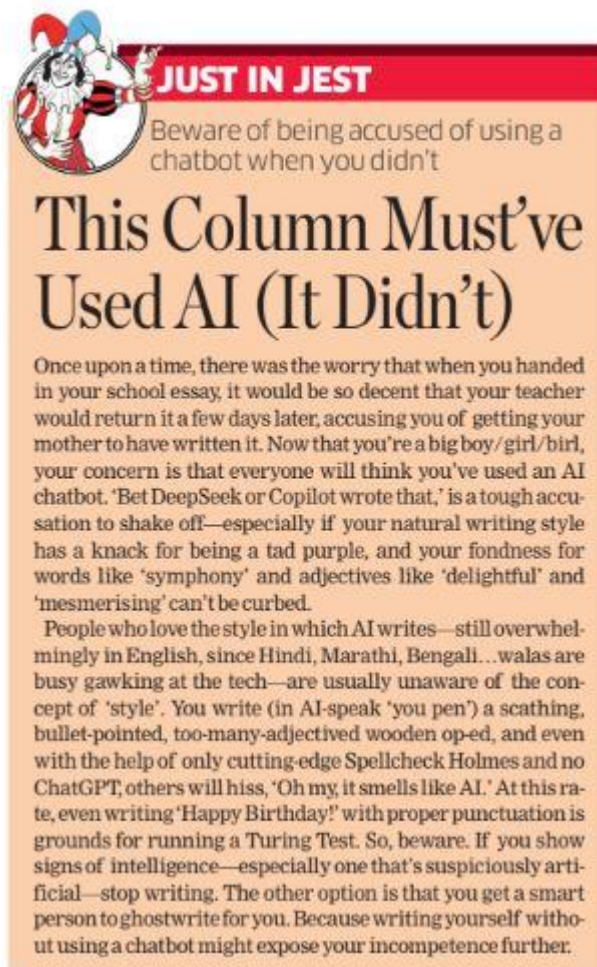
[World's first garage-built humanoid robot now yours to customize freely](#)

By Atharva Gosavi, July 07, 2025

Imagine having a humanoid robot in your kitchen preparing bread using the toaster while you get ready to leave for work.



News Articles



Source: The Economic Times Newspaper, 08-07-2025

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Link: <https://drive.google.com/file/d/1mH1WymHIXPYMcl5j3ApQ1bKJQ9RnNCEM/view>

Smarter AI Needs Smarter Humans

As AI model intelligence peaks, its reliance on complex, human-curated data is only deepening, writes **Himanshi Lohchab**

They started with microtasks such as transcribing audio files, marking tick boxes, translating language and labelling objects in images. Now, data annotators are correcting software code, checking financial statements and analysing diagnostic reports, as the training needs of artificial intelligence models become more complex. Data annotation, or simply data labelling, is the most crucial and foundational step for building high-quality datasets to train AI models, enhance accuracy, curtail hallucinations and build safety guard rails against inappropriate or harmful content. And India is fast emerging as a hub for data annotation services with flexible workers, said tier business analysts and even skilled data engineers, scientists, radiologists, lawyers, etc., contributing to building high-quality datasets. "Honestly, I think we need to retire the term 'data labelling,'" says Jonathan Siddharth, founder of Palo Alto-based talent and AI India company Turing. "It's like calling a smartphone a 'portable telephone'."

"What we're doing now is fundamentally different. We're not tagging rote and dull; we're orchestrating teams of Olympian-level talent to solve highly complex problems across industries," he said. AI models have got so smart that sometimes you need a physicist, a software engineer, and a data scientist working together just to generate data that challenges them, he explained.

Harshil Arora, founder and CEO of early stage startup Moegee, said his company is focusing on curating custom datasets for AI/ML models and agents. "Businesses now have custom data sourcing needs which capture linguistic and cultural nuances. These datasets aren't available on open libraries like Hugging Face," he said.

RIDING THE GROWTH WAVE
The global market for data annotation is likely to expand from about \$1.5 billion in 2023 to nearly \$20 billion by 2030, growing at about 25-30% each year, according to staffing firm TeamLease Digital. In India, the market was worth \$80 million in 2023 and is expected to reach nearly \$600 million by 2030, growing at almost 30% each year, Haski. And this has reflected in the growth of the work force in this segment from 20,000 in 2022 to 70,000 currently. These include annotators, quality controllers and project managers, who work in startups, IT services and crowd sourcing platforms.

"Data annotation has gotten more complex with the rise of LLMs, leading to the emergence of specialised, higher-paying roles for domain-expertise tasks," said Kapil Joshi, CEO - Quess IT Staffing, adding that some of its clients have grown 50% year-on-year. With this growth, the sector will soon witness a talent scarcity, said TeamLease Digital CEO Neel Sharma. "By 2026, the industry could face a shortage of 40-60% in skilled professionals."

"As models evolve, data demands will shift — certain types of data may require lower volumes but others will rapidly expand," said Ryan Kohn, CEO of Appen, a Washington based company which has delivered over 15,000 AI data projects, including LLM fine-tuning, evaluation, red teaming, and multimodal annotations. "A good example of this is LLM work, where elementary math question data is increasing, but data is

still growing in demand for more complex STEM (science, technology, engineering and mathematics) problems," he said. The sector's importance is underscored by Meta's recent \$14.3 billion deal to acquire a 49% stake in Scale AI, valuing the data company at \$28 billion. This has opened a multi-million opportunity for global companies like Turing and Appen as both giants (OpenAI, Google, Microsoft) have reportedly terminated their contracts with Scale. Turing's Siddharth said the deal validates that "data is as strategic as compute in the race to AGI (artificial general intelligence), and signals that the scale of investment here will rival or even exceed billions annually across frontier labs". In the past weeks, Turing has added generalist contracts worth \$20 million, the Times reported.

THE INDIA ADVANTAGE

Data companies have long depended on India's talent and scale for servicing global projects. "The depth of technical expertise — from IT grads to domain-specific PhDs in math, physics and engineering — is extraordinary. And it's evolving in sync with what AI needs: not just coding talent, but frontier minds who can help push the limits of reasoning, multimodality and agentic workflows," said Siddharth of Turing, whose 40% workforce is based in India. He added that data labs need the best minds to compete, "not just recycle the same talent pool in Silicon Valley. When a physicist in Bangalore helps train a model that might cure diseases, or an engineer in Pune improves an AI that could revolutionise education, that's the democratisation of both intellectual and opportunity."

Appen's Kohn pointed out that logical thinking and real problem-solving skills are strong in the Indian education system given the strong emphasis on mathematics and science. The company has a pool of 50,000 contributors from India.

Hardik, founder and CEO of Indika AI, said: "Over the past three years, we've seen strong global demand for multilingual, domain-specific data infrastructure which translated into 6X top-line growth for us." The company's freelance platform, Flexibench, has 70,000 registered contributors, 6% 10% of whom are working actively at any given time, he added.

Global Data Annotation Market

2025: \$6.5 billion
2010: \$20 billion

CAGR: 25-30%

India Market Size

2023: \$80 million
2030: \$500 million

CAGR: 30%

Global Workforce

2024: 400,000 projected to double every 3 years

2024: 6 million

Indian Workforce

2025: 20,000 full-time professionals, 50,000 independent contractors on global platforms, plus and 23,000 registered contributors on on-demand platforms

2022: 1 million

Average Monthly Earnings: ₹8,000 to ₹12,000

Skilled professionals in STEM can earn >₹1 lakh for freelance projects



ILLUSTRATION: ANKITA; SOURCE: TEAM LEASE, QUSS, FT REPORTS, MARKET SAMMANS 2025

Source: The Economic Times Newspaper, 08-07-2025

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