

ATHARVA ROBOTICS CENTER

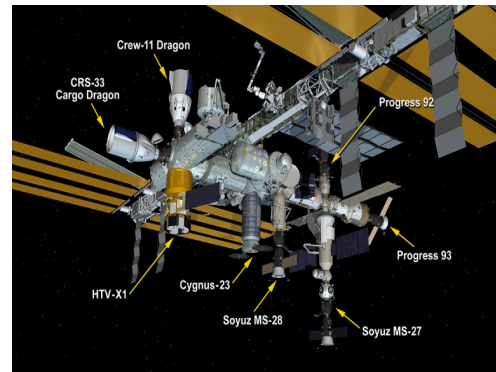
Daily News on Innovation & Technology

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Space Station First: All Docking Ports Fully Occupied, 8 Spacecraft on Orbit

By Mark A. Garcia, December 1, 2025

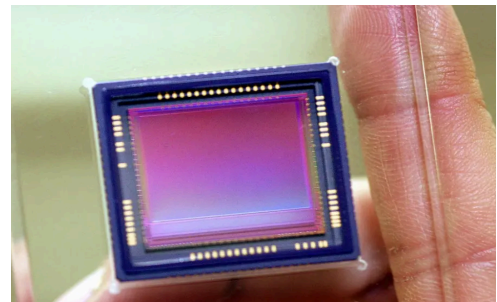
For the first time in International Space Station history, all eight docking ports aboard the orbital outpost are occupied following the reinstallation of Northrop Grumman's Cygnus XL cargo spacecraft to the Earth-facing port of the station's Unity module. The eight spacecraft attached to the complex are: two SpaceX Dragons, Cygnus XL, JAXA's (Japan Aerospace Exploration Agency) HTV-X1, two Roscosmos Soyuz crew spacecraft, and two Progress cargo ships.



Snake-inspired breakthrough brings 4K thermal vision to ordinary cameras at low cost

By Neetika Walter, December 1, 2025

A new breakthrough brings snake-like thermal vision to everyday camera sensors, pushing infrared imaging closer to mainstream, low-cost use. Snakes use specialized pit organs to detect heat signatures in total darkness, a biological superpower engineers have long wanted to replicate.



'First robotics war': Defense Ministry shows how robotic systems used in Israel-Hamas War

By YONAH JEREMY BOB, December 1, 2025

The robotic systems have gotten much more diverse and standardized, being deployed in much higher volumes to assist with exploring Hamas tunnels, to save risking soldiers' lives from that process.



[Elon Musk predicts 'working will be optional' within 10–20 years due to AI and Robotics](#)

By Ravi Hari, December 2, 2025

Elon Musk predicted that advances in AI and robotics could make work optional within the next 10 to 20 years. “My prediction is that, in the future, working will be optional. Advances in AI and robotics will bring us to a point where working is optional,” he said on Nikhil Kamath’s podcast.



[AI robot repairs 1900-year-old iconic paintings damaged in Pompeii eruption](#)

By Radifah Kabir, December 1, 2025

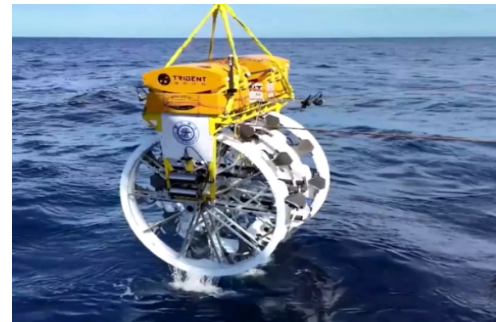
When artificial intelligence (AI) and robotics come together, wonders can be made. This is exactly what has just happened at Pompeii. A four-year research project called RePAIR (Reconstructing the Past: Artificial Intelligence and Robotics Meet Cultural Heritage) has successfully rebuilt parts of Roman wall paintings (frescoes) over 1,900 years old.



[China tests deep sea trident telescope to trace cosmic neutrinos](#)

By Kamran Aliyev, December 1, 2025

Chinese scientists say they are moving closer to building one of the world’s most powerful neutrino telescopes, an underwater array known as the Tropical Deep sea Neutrino Telescope, or TRIDENT, that will sit around 3,500 metres below the surface.



[Sino-French ocean cooperation advances clean-energy innovation](#)

By CGTN, December 2, 2025

China and France have deepened cooperation in ocean conservation in recent years, expanding joint efforts in biodiversity protection, clean-energy development and multilateral climate action. Their initiatives – from coral restoration and ecological monitoring to innovative wind-aquaculture integration – have drawn broad recognition.



[DeepSeek is back! Chinese startup launches two new models to take on Gemini and ChatGPT](#)

By Aman Gupta, December 1, 2025

China's DeepSeek launched V3.2 and V3.2-Special AI models, asserting performance comparable to GPT-5 and Google's Gemini 3 Pro. The new model achieved top scores in international math competitions, a feat that had been reserved for proprietary models so far.



News Articles

Why ChatGPT still has a edge over Google's AI

EXACTLY THREE YEARS ago ChatGPT launched as a humble web demo. It now has more than 800 million weekly users, a number that could cross 1 billion before the year is out. And for the generative AI boom it's become a bellwether, one of the fastest-growing online services of all time.

But Chief Executive Officer Sam Altman isn't done. He's ushering ChatGPT into the next phase of growth, juicing engagement by adding new personality features—and even erotic content—as he scrambles to cover his extraordinary costs. Luckily for him, ChatGPT's domination of the chatbot market looks set to continue, even as Alphabet's Google creeps up the rankings. Google's own ChatGPT clone, Gemini, captured the limelight with an update in November that jumped ahead in industry benchmarks, seeming to surpass its rival. Salesforce CEO Marc Benioff tweeted that after two hours of testing Gemini 3, he would permanently switch from ChatGPT after using it daily for three years. "The leap is insane," he tweeted. "Reasoning, speed, images, video... everything is sharper and faster."

But in terms of market share, Gemini is still far behind. In October there were 153 million monthly visits to its web-based version, according to data from market-research firm Similarweb. ChatGPT got 1.1 billion. In recent months, use of OpenAI's tool has also been growing faster than Gemini's, that same data shows.

There are a few reasons why Gemini's growth probably won't accelerate, leaving it a distant but respectable second over the next couple of years. Despite the impressive credentials as the "better" chatbot—and the huge distributive powers Google has to integrate Gemini into search and its Android mobile operating system—Google has often struggled to replicate the so-called network effects that propel an online platform to stratospheric user numbers.



PAMY OLSON

Bloomberg

Take its efforts to build a social network in the 2010s with Google+. A befuddling design and unclear purpose meant users wouldn't stay on the site, and it flopped. Google Wave and Google Buzz also failed to entice users in part because the company's strength is in utility—think search, email, and maps—not designing the habit-forming algorithms that keep people coming back to social platforms.

Google's AI chief, former neuroscientist Demis Hassabis, has long prioritised scientific achievement over product engagement. That's another reason why Gemini will likely keep improving on benchmarks while struggling to attract as many users as ChatGPT. OpenAI's Altman on the other hand is the former head of a start-up accelerator, Y Combinator, and has the instincts of someone who's lived and breathed Silicon Valley's "blitzscaling" mantra: Grow rapidly and experiment on the fly to achieve market dominance, then monetise.

To that end he has updated ChatGPT with "persistent memory" to make conversations more personalised, and has said users will be able to give the chatbot a personality like friendly or nerdy, or hold "erotic" conversations once age-gating is fully rolled out in December. OpenAI has also announced group chats, so users can bring friends or colleagues into a conversation with ChatGPT. These bells and whistles are aimed first at expanding the user base, then helping convert free users into subscribers or encouraging employers to use it more.

Google is giving Gemini whizzy new features, too. But they're more focused on making it a smart assistant with, for instance, the ability to gauge intent from shorter prompts or to plug into tools like Google Docs and Google Calendar.

By leaning into its role as a conversational and outwardly empathetic companion, ChatGPT is capitalising instead on consumers' embrace of chatbots at a time businesses have been more hesitant. That's no catastrophe for Google. With its search engine still performing well against rival chatbots, a steady cloud unit and an AI chip business that's starting to flourish, it can afford slower, gradual growth for Gemini.

With OpenAI expecting to spend \$115 billion through 2029, growing ChatGPT and converting its free users into \$20-a-month subscribers is existential and urgent. Altman has capitalised on first-mover advantage but can't afford to stop racing ahead. No wonder roughly 20% of OpenAI's workforce used to work at Meta Platforms, a company with a long history of maximising stickiness. ChatGPT has entered its engagement era. While Google is betting on being smarter, OpenAI is gambling on being harder to quit.

Source: Financial Express Newspaper, 2-12-2025

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TESLA MAKER SEES ENERGY, NOT MONEY, AS TRUE CURRENCY

Musk: AI could make work optional

FE BUREAU
New Delhi, December 1

WORK WILL BE optional, money will vanish, and energy will become the new currency — that's Elon Musk's vision of a world transformed by artificial intelligence.

In a two-hour conversation with Zerodha co-founder Nikhil Kamath on the People by WTF podcast, the Tesla and SpaceX chief predicted that AI and robotics would one day meet all human needs, erasing the foundations of today's economy. "If AI and robotics are big enough to satisfy all human needs, then money is no longer necessary," he said. "Energy is the true currency."

Musk described an AI-driven future where human labour is a choice, not a necessity. "In the future, working will be like a hobby," he said, though he added that anyone building companies or solving difficult problems would still need to "put in serious hours."

The discussion ranged across AI, investing, politics and the evolution of X, formerly Twitter. Musk said the platform, with around 600 million monthly users, could reach a billion during major global events, but stressed that its purpose was far larger. "It would be great to bring together what people say in many different languages — automatically translated — so you have the collective consciousness of



humanity," he said, describing X as a "global brain."

Asked about his 2022 acquisition of Twitter, Musk dismissed it as a power play. "Twitter had gone in a direction that had more of a negative influence on the world," he said. "What I've tried to do is just restore it to be balanced and centrist." His goal, he added, is to create "a global platform that becomes as close to the collective consciousness of humanity as possible."

Musk also predicted that communication will soon move toward "real-time video comprehension and generation" enabled by AI, though he maintained that text will continue to hold value as "more densely compressed information."

On investing, he applied first-principles thinking: "A

company is just a group of people assembled to create products and services. If they're likely to continue improving, buy the stock and don't worry about daily fluctuations." He said the US debt crisis could only be solved through technology, warning, "Interest payments on the debt exceed the entire military budget," and calling large-scale AI adoption "pretty much the only thing that's going to solve it."

He was equally candid on politics: "Politics is a blood sport. Once you get to a certain scale, politics finds you. It's quite unpleasant."

In lighter moments, Musk reflected on friendship — "A friend is someone who supports you in difficult times" — and joked about his fixation with the letter X: "Sometimes I wonder what's wrong with me."

'US gained from talented Indians immensely'

THE US HAS been an "immense beneficiary" of talent from India, SpaceX CEO Elon Musk has said, and voiced strong support for the H-1B visa programme, cautioning that shutting it down would "actually be very bad" for America.

The US tech billionaire made the remarks in an interview with investor and entrepreneur Nikhil Kamath on his podcast.

"Yes, I think America has benefited immensely from talented Indians who

have come to America... America has been an immense beneficiary of talent from India," Musk said.

On the H-1B visa, the Tesla CEO said, while there has been some misuse of the work visa programme, he strongly believes that it should not be shut down. "It would be accurate to say that... some of the outsourcing companies have gamed the system on the H-1B front. And we need to stop the gaming of the system."

"But I'm certainly not in the school of thought that

we should shut down the H-1B programme. That's where some on the right are. I think they don't realise that that would actually be very bad," Musk said.

His comments come at a time when the US has launched a massive crackdown to check abuse of the H-1B visa programme, used extensively by American

technology companies to employ foreign workers. Indian professionals, including technology workers and physicians, form one of the

largest groups of H-1B visa holders. In September, US President Donald Trump issued a Proclamation titled "Restriction on Entry of Certain Nonimmigrant Workers" as an important initial step to reform the H-1B nonimmigrant visa programme. Under the Proclamation, Trump announced a one-time fee of USD 100,000 on new H-1B visas, a move expected to impact Indian professionals seeking to work in the US.

Some of the outsourcing companies have gamed the system on the H-1B front

—PTI

Source: Financial Express Newspaper, 2-12-2025

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