

New AI Model Is Shockingly Good at “Reading” Human Minds



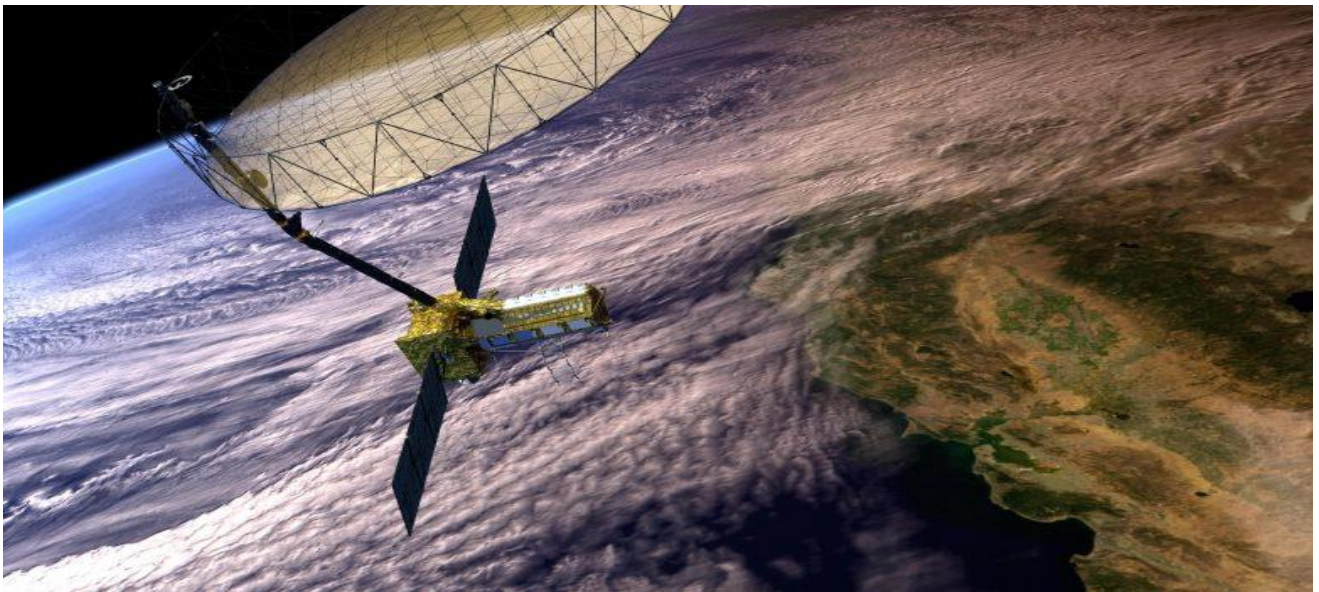
- A new AI model is demonstrating an unprecedented ability to anticipate human actions by interpreting visual and contextual cues in real time. Rather than simply reacting to movement, the system reasons about what people are likely to do next.
- Researchers from the [Texas A&M University College of Engineering](https://www.tamu.edu/) and the Korea Advanced Institute of Science and Technology have introduced a new artificial intelligence (AI) system called OmniPredict, designed to improve safety for self-driving cars.
- OmniPredict is the first system to use a Multimodal Large Language Model (MLLM) to forecast how pedestrians may behave. It draws on the same kind of underlying technology used in advanced chatbots and image recognition, but its goal is different. By pairing what it sees with contextual details, the system aims to predict, in real time, what a person is likely to do next.

**Scientists Discover How To “Purify” Light, Paving the Way
for Faster, More Secure Quantum Technology**



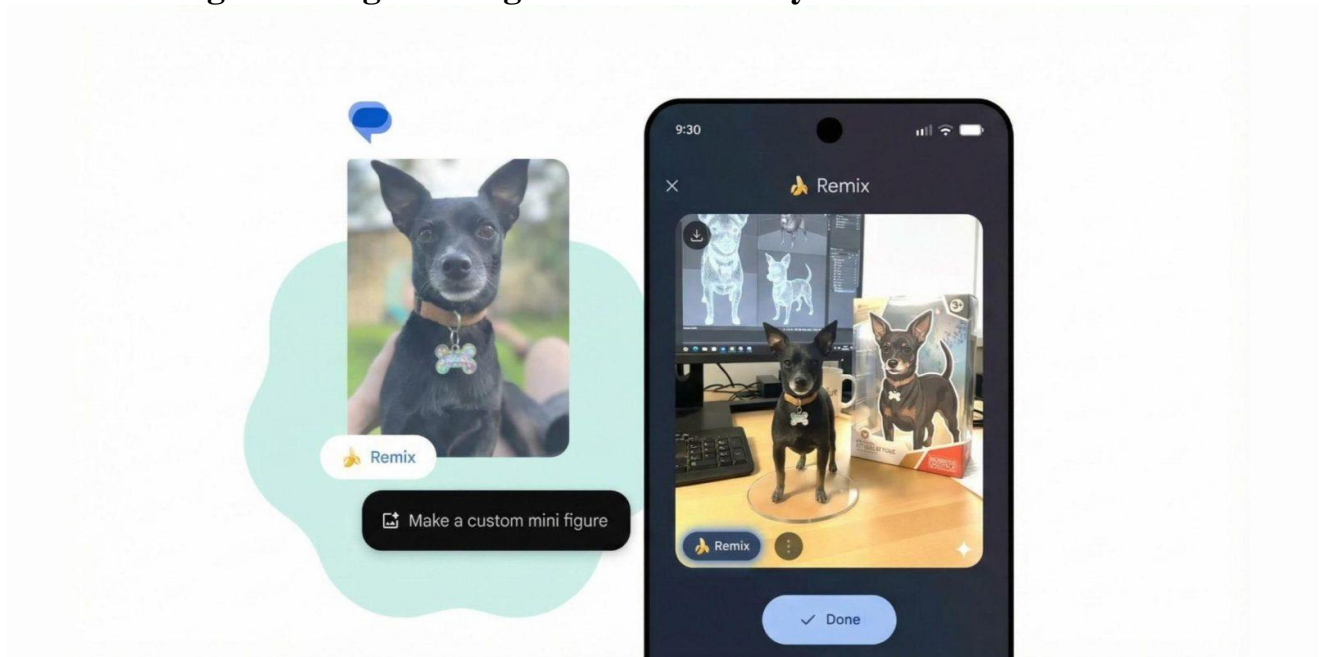
- University of Iowa scientists have identified a new way to “purify” photons, a development that could improve both the efficiency and security of optical quantum technologies.
- The team focused on two persistent problems that stand in the way of producing a reliable stream of single photons, which are essential for photonic quantum computers and secure communication systems. The first issue, known as laser scatter, arises when a laser is aimed at an atom to trigger the release of a photon, the basic unit of light. Although this method successfully generates photons, it can also produce extra, unwanted ones. These additional photons reduce the efficiency of the optical system, similar to how stray electrical currents interfere with electronic circuits.

NISAR Blasts Into Orbit: World's Most Advanced Radar Satellite to Scan Earth's Surface Every 12 Days



- NISAR, which stands for NASA-ISRO Synthetic Aperture Radar, will enhance scientific understanding of natural disasters and environmental threats. It will allow researchers to study the mechanics behind earthquakes, volcanic activity, and landslides. Beyond monitoring natural hazards, the satellite will also be used to observe critical infrastructure, including bridges, roads, and dams.
- Thanks to its ability to penetrate clouds, NISAR will be especially useful for emergency response teams during severe weather events, including hurricanes, storm surges, and floods. It will also collect data on melting glaciers, shifting ice sheets, and thinning sea ice, all of which play key roles in understanding global climate change. Additionally, the satellite will help scientists examine how environmental changes like deforestation, wildfires, and permafrost thaw are influencing the carbon cycle.

Google Messages toning down how thirsty Nano Banana Remix is



It's not hyperbolic to say that Google has been very thirsty about Nano Banana following its viral success. In Google Messages, the access points for the Nano Banana-powered Remix are being greatly toned down following the [November launch](#).

When you long-press on an image in a conversation, the "Remix" pill with a glow in the bottom-left corner is now appreciably smaller. The more important change is how Google has removed the banana emoji. In its place is a generic image icon badged with an AI sparkle

OpenAI Strikes Back at Google's Nano Banana With ChatGPT Images



This year has seen some rapid advances in AI image generation models, with Google's Nano Banana Pro going viral last month. But OpenAI is hoping to have the last word: On Tuesday, the company announced the newest version of ChatGPT Images, an AI image model with improvements that should help it follow instructions and create more detailed images.

You can take advantage of the new model beginning today. It's available to all ChatGPT users globally and available in the API as GPT-Image-1.5. You can use the model in a new dedicated space in ChatGPT for images in the sidebar, with preset styles and trending designs, built specifically for image creation -- a major upgrade from simply talking with ChatGPT to generate images

NASA finally has a leader, but its future is no more certain



After a rudderless year and an [exodus of around 4,000 employees](#) due to Trump administration cuts, NASA got what may be its first piece of good news recently. On December 17, the Senate [confirmed billionaire Jared Isaacman](#) as the agency's new administrator. He now holds the power to rehabilitate a battered engine of scientific research, or steer it towards even more disruption.

Considering the caliber of President Trump's other appointees, Isaacman is probably the best candidate for the job. Outside of being a successful entrepreneur, he has flown fighter jets and been to space twice as part of the [Inspiration4](#) and [Polaris Dawn](#) private missions. One of those flights saw him [complete the first commercial space walk](#), and travel farther from Earth than any human since the end of the Apollo program.

"Perfect is the enemy of the good. Isaacman checks a lot of boxes," says Keith Cowing, a former NASA employee and the founder of [NASA Watch, a blog dedicated to the agency](#). "He's passed every requirement to fly in a spacecraft that American astronauts at NASA are required to pass. He also went out of his way to have a diverse crew, and shove as much science as he could in those missions."

Source: <https://www.engadget.com/science/space/nasa-finally-has-a-leader-but-its-future-is-no-more-certain-201109072.html>