

Weekly Discovery

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5 Jan - 9 Jan 2026

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AI

Eight Actually Interesting Uses of AI From 2025



"It might have been the year of AI "slop", but 2025 also saw the emergence of some genuinely innovative, intriguing and even beneficial uses for [artificial intelligence](#). Here, we round up eight of our favourites as part of [Dezeen's Review of 2025](#).

"Slop" was the defining word of 2025 – at least [according to Merriam-Webster](#) – and describes the flood of mindless, machine-generated content that has flooded social media courtesy of generative AI systems like [OpenAI's Sora 2](#).

Meanwhile, the companies creating these models are still locked in their arms race to create the most intelligent algorithm, spending [unthinkable amounts of money](#) to build up their vast data centres, which are already generating [more annual carbon emissions than New York City](#) and [quizzing more water than humans](#) (via water bottles that is).

But outside of the generative [AI bubble](#), architects, designers and engineers are dreaming up some actually interesting new applications for the fledgling technology, from visualising dreams and keeping plants alive to finding salvageable materials among the ruins of Ukraine."

Source: [Dezeen](#) (29 Dec 2025)

AI

The Top 6 AI Stories Of 2025 AI Coding, AGI, And More Made Up Spectrum's Best Stories



"[Artificial intelligence](#) in 2025 was less about flashy demos and more about hard questions. What actually works? What breaks in unexpected ways? And what are the environmental and economic costs of scaling these systems further?

It was a year in which [generative AI](#) slipped from novelty into routine use. Many people got accustomed to using AI tools on the job, getting their answers from [AI search](#), and confiding in [chatbots](#), for better or [for worse](#). It was a year in which the tech giants hyped up their [AI agents](#), and the general public seemed generally uninterested in using them. AI slop also became impossible to ignore—it was even Merriam-Webster's [word of the year](#)."

Source: [IEEE Spectrum](#) (31 Dec 2025)



ARCHITECTURE

Pedestrianisation Initiatives and Unstudio's Central Yards Theatre in Hong Kong: This Week's Review



"Across different geographies and scales, this week's architecture news reflects a sustained focus on how cities and buildings are being recalibrated in response to evolving patterns of movement, work, and collective life. Across multiple contexts, public space and mobility remain central concerns, with streets, downtowns, and large-scale developments serving as testing grounds for new approaches to accessibility, resilience, and everyday use. Pedestrianisation initiatives and community-led visions point to evolving governance models and long-term urban strategies, while cultural and research-driven platforms continue to frame these changes within broader public discourse. In parallel, progress on major mixed-use and corporate projects underscores the growing integration of digital infrastructure, environmental performance, and flexible spatial frameworks within contemporary architecture."

Source: [Archdaily](#) (1 Jan 2026)

ARCHITECTURE

The Top 10 Chinese Buildings Of 2025



"China editor Christina Yao selects the year's best Chinese architecture projects including grand schemes by international studios BIG, OMA and Zaha Hadid Architects, as well as small-scale pavilions from local studios."

Source: [Dezeen](#) (30 Dec 2025)

ARCHITECTURE

"Celestial Boulders" Of Woven Bamboo Shade Eco-Farm in China



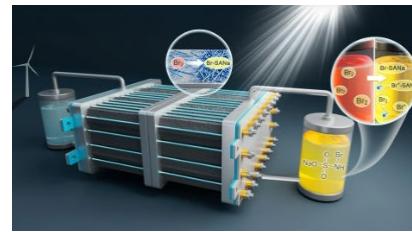
"Boulder-shaped canopies of woven bamboo shelter the spaces of Luxelands Farm, an eco-farm in China designed by Various Associates.

Located along the Zhujia River in the Jiang'an District, the animal farm sits at the heart of a vast, 230,000-square-metre development named LuxeOasis that was initiated by Luxelakes Cultural Tourism to combine art, nature and cultural tourism."

Source: [Dezeen](#) (3 Jan 2026)

BATTERIES

This Tiny Chemistry Change Makes Flow Batteries Last Far Longer



"A new advance in bromine-based flow batteries could remove one of the biggest obstacles to long-lasting, affordable energy storage. Scientists developed a way to chemically capture corrosive bromine during battery operation, keeping its concentration extremely low while boosting energy density through a two-electron reaction. This approach sharply reduces damage to battery components and allows the use of cheaper materials."

Source: [Chinese Academy Sciences](#) (1 Jan 2026)

ENERGY

China's "Artificial Sun" Just Broke a Fusion Limit Scientists Thought Was Unbreakable

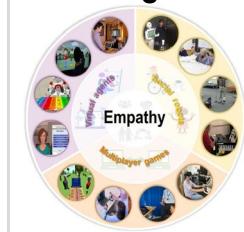


"Researchers using China's "artificial sun" fusion reactor have broken through a long-standing density barrier in fusion plasma. The experiment confirmed that plasma can remain stable even at extreme densities if its interaction with the reactor walls is carefully controlled. This finding removes a major obstacle that has slowed progress toward fusion ignition. The advance could help future fusion reactors produce more power."

Source: [Chinese Academy of Sciences Headquarters](#) (4 Jan 2026)

HEALTH AND MEDICINE

Artificial Empathy in Therapy and Healthcare: Advancements in Interpersonal Interaction Technologies



"Healthcare and therapy systems face a worsening workforce shortage, creating an urgent need for technologies that can support or augment human roles. However, much existing work emphasizes functional-task support while overlooking the emotional impact humans contribute—an omission that is especially critical in care contexts where empathy and emotional support are central to patient well-being. In rehabilitation, for example, robots can deliver highly repeatable, standardized training, yet still fall short of human therapists; a key missing ingredient is the positive affective benefit that typically arises from interpersonal interaction during therapy, which has been underestimated and remains difficult to integrate into technological systems. Interpersonal interaction can strengthen the patient-clinician relationship and improve satisfaction, trust, adherence, and clinical outcomes, but resource constraints make consistent, high-quality empathetic interaction hard to sustain. "This motivates "artificial empathy," defined as a machine's capacity to perceive, interpret, and simulate empathic responses during human-machine interaction—implemented via algorithmic recognition and response rather than genuine affective experience," said the author Tianyu Jia, a researcher at Imperial College London. "This review surveys major platforms—multiplayer games, social robots, and virtual agents—and how they incorporate interpersonal interaction to advance artificial empathy in therapy and healthcare."

Source: [Eurekalert!](#) (4 Jan 2026)

RESEARCH

MIT's Top Research Stories Of 2025

SCIENCE

Science In 2050: The Future Breakthroughs That Will Shape Our World — And beyond

SUSTAINABILITY

Scientists Turn Carrot Waste into Protein People Prefer

TECHNOLOGY

CES 2026 Preview: E-Ink Smartphone, Allergen Detector, And More: 5 Cool Devices on Display at the Year's



"In 2025, MIT's research community had another prolific year filled with exciting scientific and technological advances. To celebrate the achievements of the past 12 months, MIT News highlights some of our most-read stories from this year."



"To adapt a cliché about computer models, predictions of the future are usually wrong, but some are interesting. And *Nature* has a long history of seeking stimulation in forecasts, projections and auguries about how research might unfold in the coming decades. Most notably, the journal marked the end of the twentieth century and the onset of the twenty-first with supplements dedicated to [scientific soothsaying](#), and a bold prediction, from then-editor Philip Campbell, that life based on something other than DNA [would be discovered by 2100](#). (It was a statement he called foolish then, but stands by today.)

So, with peer review suspended and *Nature*'s stated aim of discussing the "interpretation of topical and coming trends" firmly underlined, let's set the controls of our (stubbornly still undiscovered) time machine for 2050 and take a cautious peek outside. Prepare for technological leaps, solving the puzzle of dark matter and perhaps being able to study enough people to wave goodbye to many diseases."



"Scientists have discovered a clever way to turn carrot processing leftovers into a nutritious and surprisingly appealing protein. By growing edible fungi on carrot side streams, researchers produced fungal mycelium that can replace traditional plant-based proteins in foods like vegan patties and sausages. When people sampled the foods, many preferred the versions made entirely with the fungal protein over those made with soy or chickpeas."



"In a few days, Las Vegas will be inundated with engineers, executives, investors, and members of the press—including me—for the annual [Consumer Electronics Show](#), one of the largest tech events of the year.

If you can dream it, there's a good chance it'll be on display at [CES 2026](#) (though admittedly, much of this tech won't necessarily make it to the mainstream). There will be a range of [AI toys](#), AI notetakers, and "AI companions," [exoskeletons](#) and [humanoid robots](#), and health tech to track your hormones, brain activity, and... [bathroom activity](#).

This year's event will have keynote addresses from the CEOs of tech giants including [AMD](#) and [Lenovo](#), and thousands of booths from companies spanning legacy brands to brand-new [startups](#).

I'm excited to stumble across unexpected new tech while wandering the show floor. But as I prepare for this year's event, here are some of the devices that have already caught my eye."

Source: [MIT News](#) (22 Dec 2025)

Source: [Nature](#) (30 Dec 2025)

Source: [ACS](#) (30 Dec 2025)

Source: [IEEE Spectrum](#) (3 Jan 2026)

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