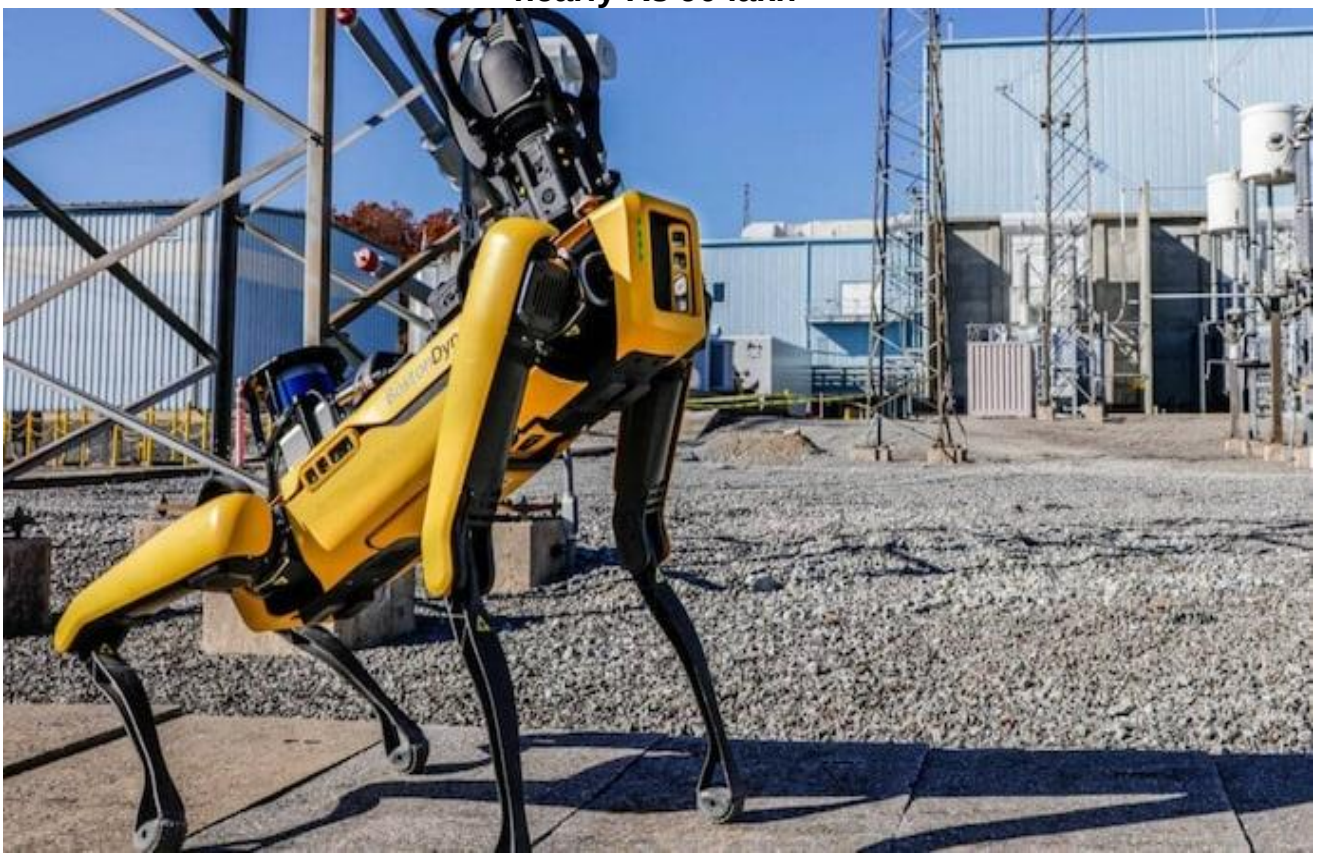
ATHARVA EDUCATIONAL TRUST'S
COLLEGE OF HOTEL MANAGEMENT & CATERING TECHNOLOGY
(Recognized by Government of Maharashtra & Affiliated to University of Mumbai- Estd. 2007-2008)
ISO 9001:2015 ISO 22000:2018
NAAC Accredited

Department of Data Science

Weekly Data Science Bytes

This robot dog is now part of over 60 bomb squads, it costs nearly Rs 90 lakh



- Spot, the four-legged robot from Boston Dynamics, might be famous for its viral dance videos, but its real work is far from entertainment. Weighing about as much as a German Shepherd, this high-tech "robot dog" is now stepping into life-and-death scenarios, joining bomb squads, SWAT teams, and rescue units across North America.
- Five years since its debut, Spot is now in use by more than 60 police departments across the US and Canada, taking on dangerous missions like armed standoffs, hostage rescues, and hazardous materials operations. Each unit carries a hefty price tag, starting around $100,000 (approximately Rs 90 lakh) and reaching $250,000 with advanced add-ons.

Source:https://www.indiatoday.in/technology/news/story/this-robot-dog-is-now-part-of-over-60-bomb-squads-it-costs-nearly-rs-90-lakh-2822559-2025-11-19

Microsoft's Windows 11 introduces AI agents in the background, managing file

- Microsoft is taking a significant step in its AI strategy for Windows 11 with a new experimental capability called Agent Workspace. This feature is designed to let AI agents operate quietly in the background, with controlled access to key personal folders so they can carry out tasks while users continue working normally.

- Agent Workspace also introduces dedicated runtimes, desktops and user accounts for these agents, allowing them to run continuously if the user decides to switch the feature on. It can be enabled through Settings > System > AI Components > Experimental Agentic Features.

- "These experiences are designed to be opt-in; we want customers to have full control over when and how they engage with Copilot and these agents," Navjot Virk, corporate vice president of Windows experiences, told The Verge.

Source: https://economictimes.indiatimes.com/tech/artificial-intelligence/microsofts-windows-11-introduces-ai-agents-in-the-background-managing-files/articleshow/125432411.cms?from=mdr&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

MIT Ultrasonic Device Shakes Drinking Water Out of Thin Air

Tapping the Air for Water Harvesting

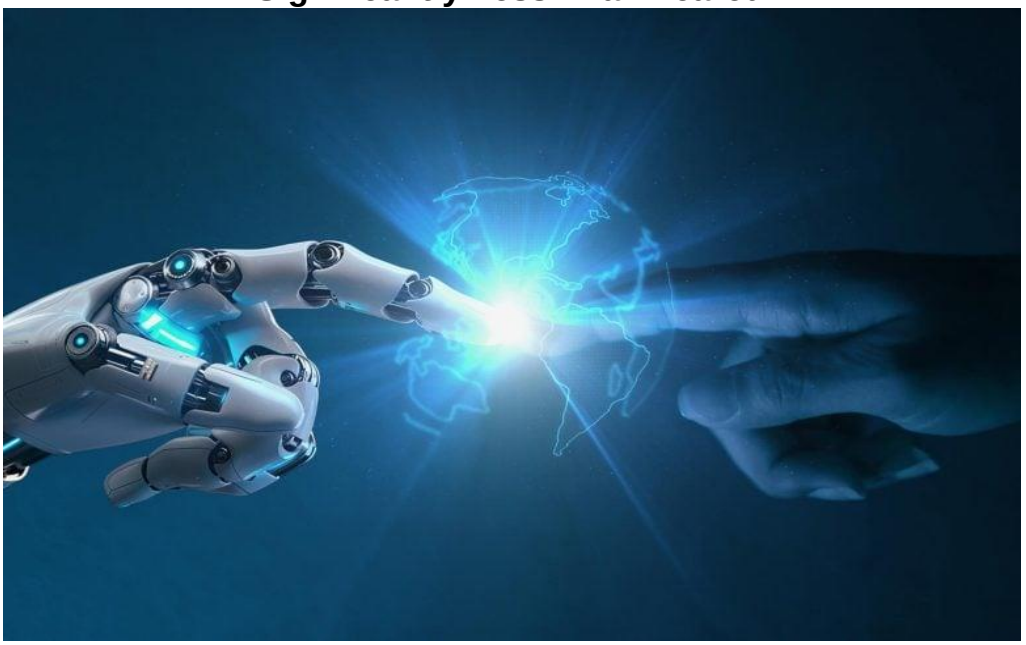
- Feeling thirsty? It may be possible to draw drinking water straight from the air. Even very dry places still hold small traces of humidity that the right materials can capture and release as clean, drinkable water. In the last few years, researchers have created many sponge-like materials capable of this "atmospheric water harvesting."

- However, getting the collected water back out of these materials typically involves heat — and patience. Most systems depend on sunlight to warm the material until the trapped moisture evaporates and condenses into liquid form, a process that can stretch on for hours or even days.

- MIT engineers now report a way to speed up this recovery step. Instead of relying on sunlight to coax water out, the team uses ultrasonic vibrations that physically shake the moisture free

Source: https://scitechdaily.com/mit-ultrasonic-device-shakes-drinking-water-out-of-thin-air/

Study Debunks Major Myth: AI's Energy Usage Is Significantly Less Than Feared

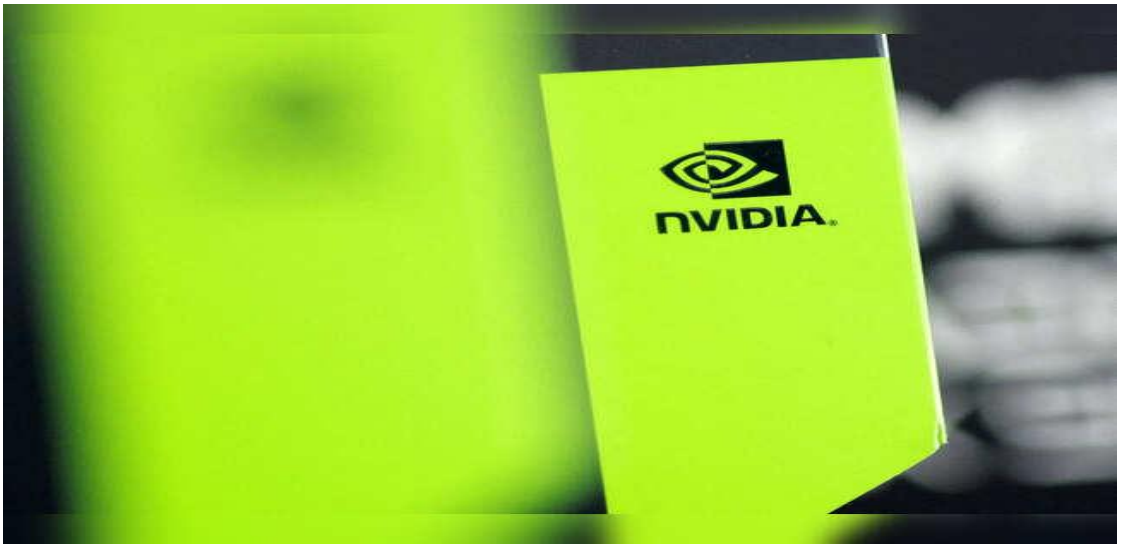


- Scientists from the University of Waterloo and the Georgia Institute of Technology merged data on the U.S. economic system with estimates of how widely AI is being adopted across different industries. This approach allowed them to project the potential environmental outcomes if AI continues to expand at its present pace.

- Information from the U.S. Energy Information Administration shows that 83 percent of the nation still relies on petroleum, coal and natural gas, fuels that release heat-trapping emissions when used. The researchers determined that although AI-related electricity consumption in the United States is comparable to the total energy use of Iceland, this amount remains too small to register meaningfully at the national or global level.

SOURCE:https://scitechdaily.com/study-debunks-major-myth-ais-energy-usage-is-significantly-less-than-feared/

Nvidia reports 'off the charts' demand for AI chips



- Nvidia shares climbed Wednesday after it beat quarterly earnings expectations on fierce demand for its sophisticated chips that power artificial intelligence.
- The solid results come amid increasing talk among Wall Street analysts of an AI bubble, with all eyes on how Nvidia, the industry's bellwether company, will weather the doubts.
- "There's been a lot of talk about an AI bubble," Nvidia chief executive Jensen Huang said on an earnings call.

Source: https://economictimes.indiatimes.com/tech/technology/nvidia-reports-off-the-charts-demand-for-ai-chips/articleshow/125454573.cms?from=mdr&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

Tesla CEO Elon Musk says Optimus robot can have consciousness like you in 20 years

- At the last shareholders' meeting, where Tesla CEO Elon Musk celebrated the approval of his new salary package with dancing Optimus robots, an uncanny preview of the future was shared. Musk, when asked about whether these Tesla robots could get to see the consciousness of a real human being, responded affirmatively, confirming that people could have Tesla bots with such consciousness in less than 20 years.
- Speaking at Tesla's recent shareholder meeting, Musk outlined how the Tesla Optimus robot might soon host human consciousness via Neuralink integration. The process, which could mark a notable shift in robotics, may be less than 20 years away, said Musk

Source: https://www.financialexpress.com/life/technology-tesla-optimus-robot-can-have-consciousness-like-you-in-20-years-says-ceo-elon-musk-4047030/