Department of Data Science
Weekly Data Science Byte

India 'AI Impact Summit 2026' to focus on democratisation of AI

- Artificial Intelligence (AI) has emerged as a central pillar of India's development journey, strengthening governance, improving public service delivery and enabling solutions that can reach citizens at scale. Just as electricity, computers, the internet and mobile phones reshaped human progress, AI is now working alongside people to transform sectors such as agriculture, healthcare, education, manufacturing, climate action and governance.
- For India, the democratisation of AI is essential to ensure that these benefits are widely shared and aligned with the vision of Viksit Bharat by 2047. Building on this vision, the India–AI Impact Summit 2026 will be held from February 16 to 20 at Bharat Mandapam, New Delhi. As the first global AI summit hosted in the Global South, it will bring together global leaders, policymakers, technology companies and experts to deliberate on AI's role in inclusive growth, governance and sustainable development.

Source: https://ddnews.gov.in/en/democratising-ai-in-india-expanding-access-to-technology-and-skills/

Can IIT Bombay's leaf-to-gas technology help tackle India's LPG crisis? Know how it works

- Indian Institute of Technology Bombay has developed and deployed a patented biomass gasification technology to convert dry leaf waste into cooking fuel, reducing LPG consumption on campus by 30 to 40 percent. The innovation comes at a time when concerns over LPG supply have triggered panic buying in some areas.

Source:https://economictimes.indiatimes.com/news/new-updates/can-iit-bombays-leaf-to-gas-technology-help-tackle-indias-lpg-crisis-know-how-it-works/articleshow/129930068.cms?from=mdr

Indian space startups partner to develop space debris removal technology

- Two Indian space startups, Pixxel and Cosmoserve Space, have announced a collaboration to advance technologies aimed at removing space debris—defunct, human-made objects orbiting Earth that pose growing risks to satellites and space missions.
- Under the partnership, Bengaluru-based Pixxel will provide a satellite bus—essentially the main structure of a satellite that supports mission operations—to Hyderabad-based Cosmoserve for its upcoming in-orbit demonstration mission.
- Pixxel founder and CEO Awais Ahmed said the collaboration aligns with the company's vision of ensuring sustainable use of space.
- "At Pixxel, we believe responsible access to space requires active stewardship of the orbital environment. Partnering with Cosmoserve is a natural extension of our commitment to building a sustainable future in space," he said

Source : https://www.awazthevoice.in/india-news/indian-space-startups-partner-to-develop-space-debris-removal-technology-55745.html

For the First Time, ChatGPT Has Solved an Unproven Math Problem in Geometry

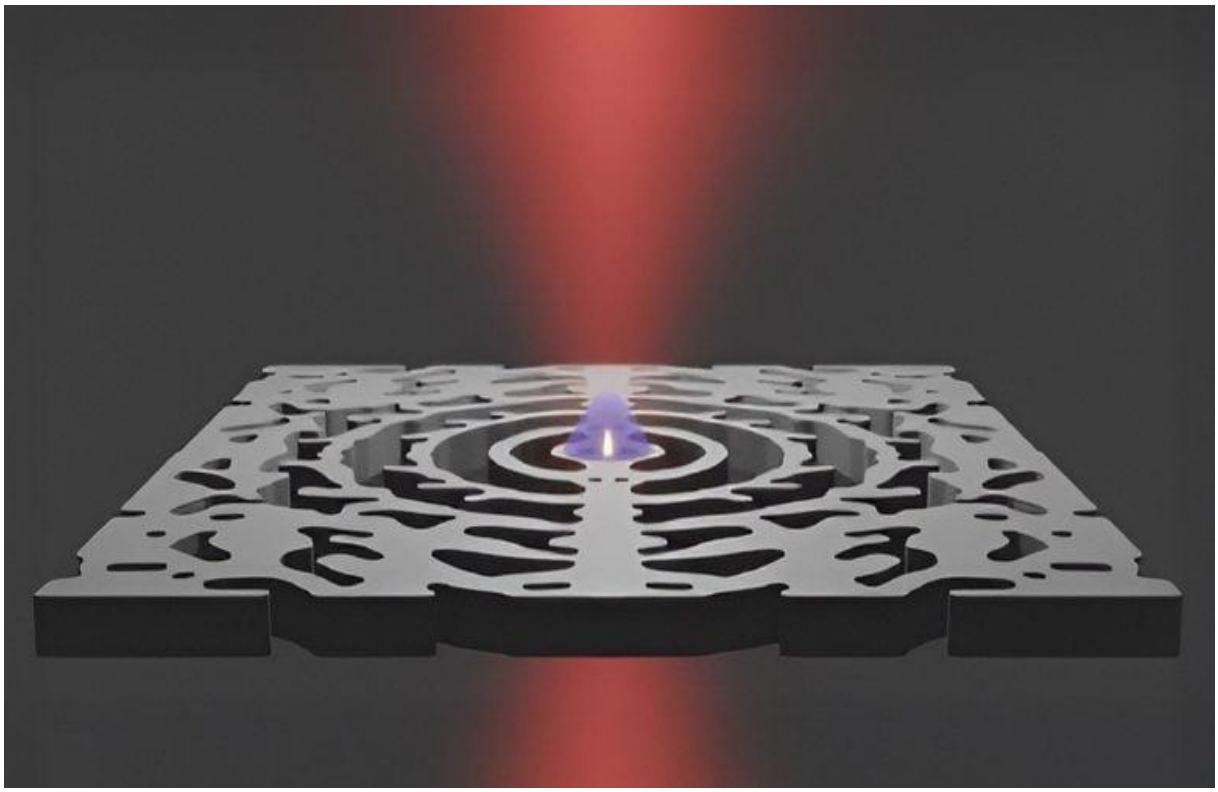
- Researchers at VUB's Data Analytics Lab report that commercial language models can produce original mathematical proofs. In their study, the team shows that OpenAI's large language model ChatGPT-5.2 (Thinking) was able to solve a mathematical problem on its own.
- The case focused on proving a 2024 conjecture proposed by mathematicians Ran and Teng. A conjecture is a statement believed to be true based on patterns or repeated results, but it has not yet been formally proven. Once a valid proof is established, the conjecture becomes a theorem.

- According to the study, the final proof emerged from seven chat sessions with ChatGPT and four evolving versions of the argument. The model played a key role in exploring possible approaches, while human researchers ensured the reasoning was correct and logically complete.

Source: https://scitechdaily.com/for-the-first-time-chatgpt-has-solved-an-unproven-math-problem-in-geometry/

Scientists Create Tiny "Nanolaser" That Could Revolutionize Future Computers

- Described in *Science Advances*, the device is small enough to be embedded by the thousands onto a single microchip. Instead of relying on electrical currents, which generate heat and slow performance, these nanolasers could transmit information using photons. This shift could dramatically increase processing speeds while reducing energy demands across everything from smartphones to massive data centers.
- "The nanolaser opens up the possibility of creating a new generation of components that combine high performance with minimal size. This could be in information technology, for example, where ultra-small and energy-efficient lasers can reduce energy consumption in computers, or in the development of sensors for the healthcare sector, where the nanolaser's extreme light concentration can deliver high-resolution images and ultrasensitive biosensors," says DTU professor Jesper Mørk.



Source: https://scitechdaily.com/scientists-create-tiny-nanolaser-that-could-revolutionize-future-computers/