

Department of Data Science
Weekly Data Science Bytes

**Scientists develop 'superhuman' robotic vision system, and other
technology news you need to know**



- Scientists are developing a robotic system that can see through thick smoke, intense rain and around corners.
- The tool, PanoRadar, is equipped with an innovative radio-based sensing system which, combined with AI, allows it to build a 3D view of its environment. While radar has been in use for a long time, the robot uses a spinning mechanism to direct waves in all directions which allows it to build a more complete picture of its surroundings.
- "What we have been trying to do here is basically help robots obtain superhuman vision – to see in scenarios where human eyes or traditional visual sensors cannot," Professor Mingmin Zhao, who is developing the technology with his students at the University of Pennsylvania, told [the BBC](#).
- The robot senses the reflection of radio waves off surfaces, and unlike visible light waves, for example, they are not blocked by tiny particles such as smoke. Because of this, Professor Zhao hopes in future the technology could help search-and-rescue robots help save people from conditions such as burning buildings

First 'Made in India' semiconductor chip expected by 2025: Vaishnaw



"Under Prime Minister Narendra Modi's leadership, electronic manufacturing in Madhya Pradesh has gained significant momentum. Two electronic manufacturing clusters have been approved by PM Modi one each in Bhopal and Jabalpur," he said. Currently, 85 companies are actively engaged in the electronics manufacturing sector in the state, marking a major success for the double-engine government, Vaishnaw said. The government's commitment to technological advancement by announcing the training of 20,000 engineers under the Future Skills Programme in Madhya Pradesh, he added

Flying Car Costing Rs 2.5 Crore Takes Flight For The First Time



- A futuristic vehicle, touted as the antidote to serpentine traffic jams, has taken its first flight. Alef Aeronautics' Rs 2.5 crore (\$300,000) vehicle can be driven like a normal car in the streets but it also has propellers in the bonnet and the boot that allows it to take off at any time. The US-based automaker released the first video of the vehicle soaring into the sky, which appears to be straight out of a sci-fi movie.
- Using distributed electric propulsion, with a mesh layer covering the propeller blades, the car was able to soar above the ground. As per a report in *New York Post*, the company used a prototype for the trial which was an ultralight version of the Alef Model Zero.
- Comparing the achievement to the Wright Brothers' Kitty Hawk video from 1903, Jim Dukhovny, CEO of Alef said: "This drive and flight test represents an important proof of technology in a real-world city environment."
- Source: <https://www.ndtv.com/offbeat/watch-flying-car-costing-rs-2-5-crore-takes-flight-for-the-first-time-7771124>

DeepSeek rushes to launch new AI model as China goes all in



- The Chinese startup triggered a \$1 trillion-plus sell-off in global equities markets last month with a cut-price AI reasoning model that outperformed many Western competitors.
- Now, the [Hangzhou-based firm](#) is accelerating the launch of the successor to January's R1 model, according to three people familiar with the company.
- Deepseek had planned to release R2 in early May but now wants it out as early as possible, two of them said, without providing specifics

Philips accelerates precise imaging with unique AI technologies in MRI to improve patient outcome. Philips integrates advanced AI algorithms into its MRI systems, featuring Dual AI-driven engines in SmartSpeed



- Innovations include the latest AI-enabled MR Workspace software to enhance patient throughput, reduce scan times, and improve image quality—leading to more accurate diagnoses, shorter wait times, and reduced backlogs for MRI scans
- The latest technology is available across Philips' 1.5T and 3.0T MRI scanners [2], including the latest helium-free 1.5T high-performance BlueSeal wide-bore system [3,4], supporting healthcare providers worldwide.