

ATHARVA ROBOTICS CENTER

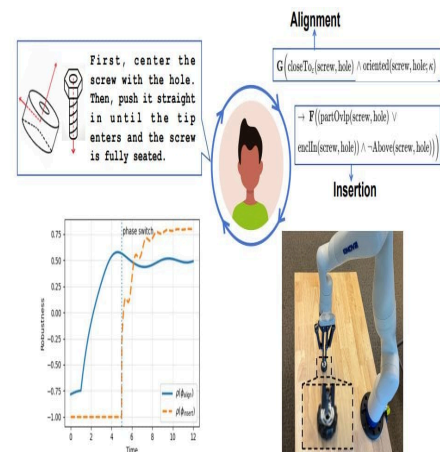
Daily News on Innovation & Technology

17th December, 2025

Spatial Logic Enables Precise Robotic Manipulation by Converting Natural Language into Geometric Constraints

By Rohail T., December 17, 2025

Robotic manipulation often requires precise understanding of spatial relationships and temporal sequences, yet current methods struggle to integrate these elements effectively. Licheng Luo from University of California, Riverside, Yu Xia, and Kaier Liang from Lehigh University, along with Mingyu Cai from University of California, Riverside, address this challenge by introducing a new approach that translates natural language instructions into formal specifications of space and time.



Nordic Development Kit Combines Satellite and Cellular IoT Connectivity

By Nordic Semiconductor, December 17, 2025

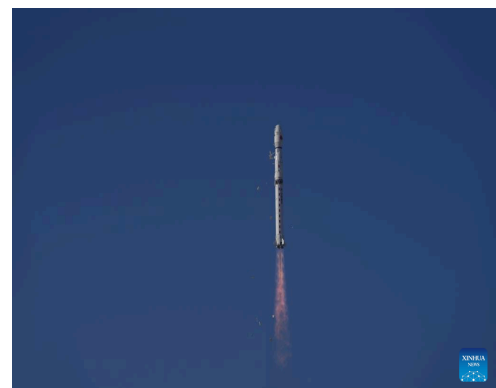
Nordic Semiconductor has launched the nRF9151 SMA Development Kit (DK), a specialized DK for RF engineers developing cellular IoT, DECT NR+, and Non-Terrestrial Network (NTN) applications. Alongside the hardware release, Nordic has launched new modem firmware that adds NTN (satellite) support to the nRF9151 module – marking Nordic's first step toward enabling direct-to-satellite communication.



China launches satellite to enhance survey, mapping service capabilities

By Xinhua, Taipei, December 17, 2025

A Long March-4B rocket carrying Ziyuan III 04 satellite blasts off from the Taiyuan Satellite Launch Center in north China's Shanxi Province, on Dec. 16, 2025. The satellite was launched at 11:17 a.m. Beijing Time. 16 (Xinhua) -- China on Tuesday sent a new satellite into space from the Taiyuan Satellite Launch Center in the northern province of Shanxi, in a move to enhance the country's survey and mapping service capabilities.



[Google DeepMind Releases Groundbreaking AI Model: Latest 2025 Developments and Business Opportunities](#)

By Blockchain, December 17, 2025

According to Google DeepMind (@GoogleDeepMind), a new AI development was announced on December 17, 2025, signaling significant advancements in artificial intelligence technology. While the specific details of the update were not disclosed in the tweet, Google DeepMind's announcements typically precede the release of innovative AI models or research breakthroughs.



[ROCKET LAUNCHES TODAY \(DEC. 16, 2025\): AMAZON LEO'S ATLAS V LIFTOFF, CHINA'S ZIYUAN MAPPING SATELLITE, AND THE NEXT 48 HOURS IN SPACEFLIGHT](#)

By Marchin Frackiewicz, December 16, 2025

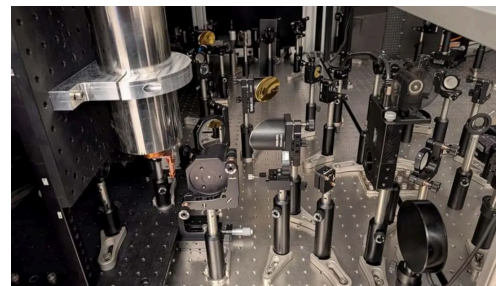
Tuesday, December 16, 2025 delivered a classic “modern spaceflight” mix: a broadband-constellation push from Florida, a high-resolution Earth-observation mission from China, and a scrubbed smallsat launch attempt that underscores how tightly packed — and technically unforgiving — today’s global launch calendar has become



[Ultrafast light drives 10x magnetic motion, offering new tools for quantum devices](#)

By Aamir Kholam, December 16, 2025

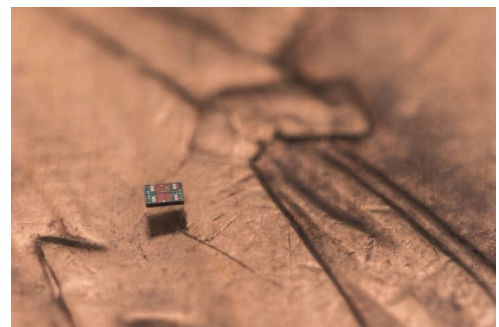
Scientists have uncovered a new way to control magnets using flashes of light lasting less than a trillionth of a second. The approach triggers unusually large magnetic motion without direct contact or sustained energy input.



[Scientists at Penn and Michigan create 'world's smallest programmable, autonomous robots'](#)

By David Edwards, December 17, 2025

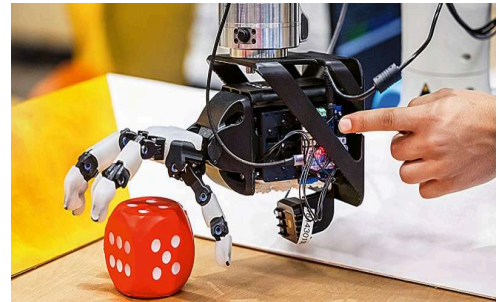
Researchers at the University of Pennsylvania and University of Michigan have created what they describe as “the world’s smallest fully programmable, autonomous robots”: microscopic swimming machines that can independently sense and respond to their surroundings, operate for months and cost just a penny each.



[AI-powered robotic hands learn dexterity by mimicking human movements and anatomy](#)

By Samuel Schlaefli, ETH Zurich, December 16, 2025

Step inside the Soft Robotics Lab at ETH Zurich, and you find yourself in a space that is part children's nursery, part high-tech workshop and part cabinet of curiosities. The lab benches are strewn with foam blocks, stuffed animals—including a cuddly squid—and other colorful toys used to train robotic dexterity.



[China launches new stereo mapping satellite](#)

By CGTN, December 16, 2025

China launched a new stereo mapping satellite from the Taiyuan Satellite Launch Center in north China's Shanxi Province on Tuesday. A Long March-4B rocket, carrying the Ziyuan III 04 satellite, blasted off at 11:17 a.m. Beijing Time. It has sent the satellite into preset orbit.





ATHARVA
ROBOTICS CENTER