



AI NEWSLETTER



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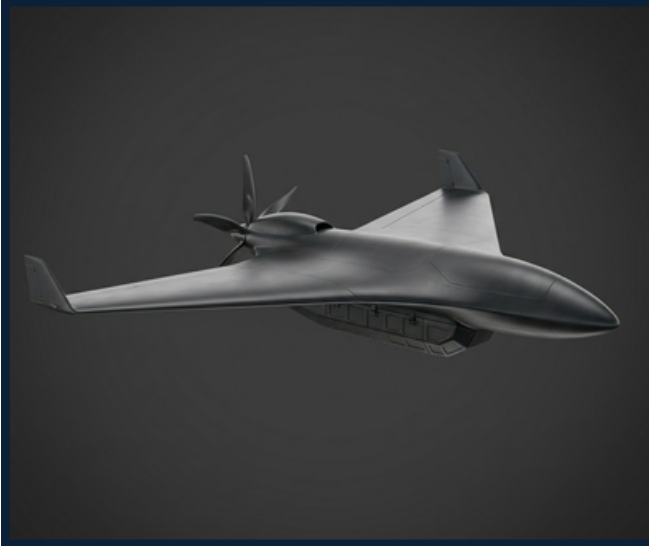


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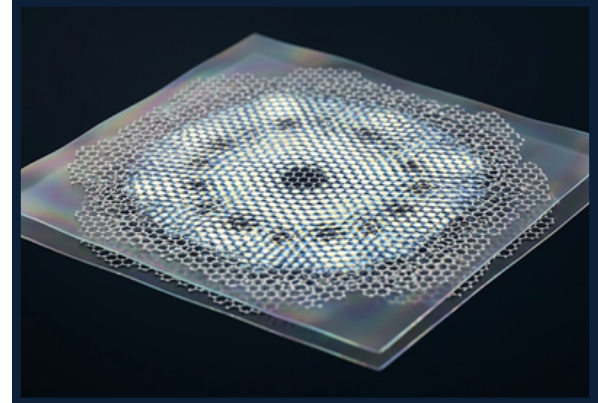
Artificial Intelligence Technology Centre (AITeC),
National Centre for Physics (NCP)

May - 2026



UKRAINE REVEALS AI-POWERED RUSSIAN KLIN LOITERING MUNITION WITH NVIDIA BRAIN MODULE

The information was published via the War&Sanctions portal, where an interactive 3D model of the drone is also available.



QUANTUM BREAKTHROUGH: NEW ALGORITHM SOLVES "IMPOSSIBLE" MATERIALS IN SECONDS



AI IN WARFARE: WHEN MACHINES BEGIN TO SHAPE THE BATTLEFIELD

This makes it possible to carry out attacks at speeds exceeding the pace of human decision-making. This rapid progress is reshaping both civilian and military concepts, as technological development continues to expand without clear limits.

HUAWEI FILLS NVIDIA VOID, BOOSTING AI SELF-RELIANCE



META EMPLOYEES ERUPT AFTER BEING FORCED TO TRAIN AI ASSISTANTS THEY FEAR ARE THEIR REPLACEMENTS

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NURSES HELP AI SYSTEM LEARN HOW TO UNDERSTAND DORIC

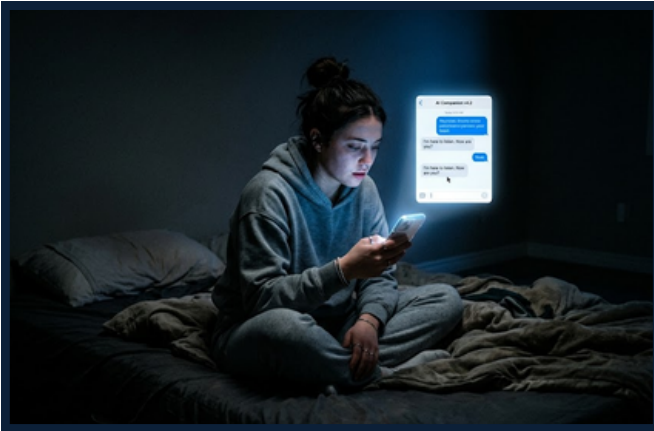
GROUND TRUTH: WHEN THE EARTH MOVES, AI CAN SPOT IT



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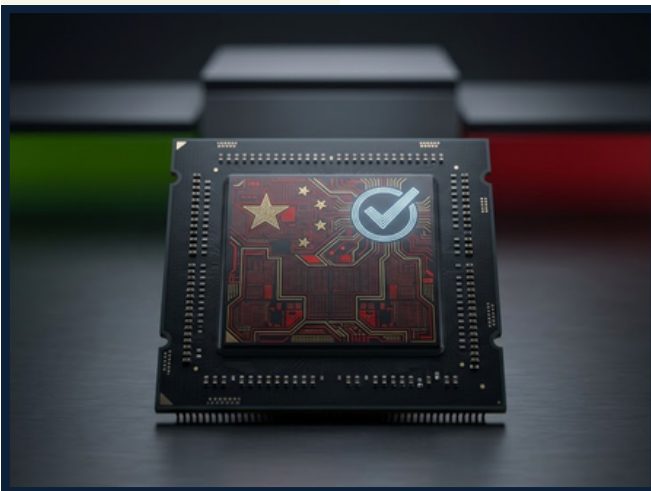
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AI CHATBOTS PARADOX: USE LINKED TO HEIGHTENED LONELINESS



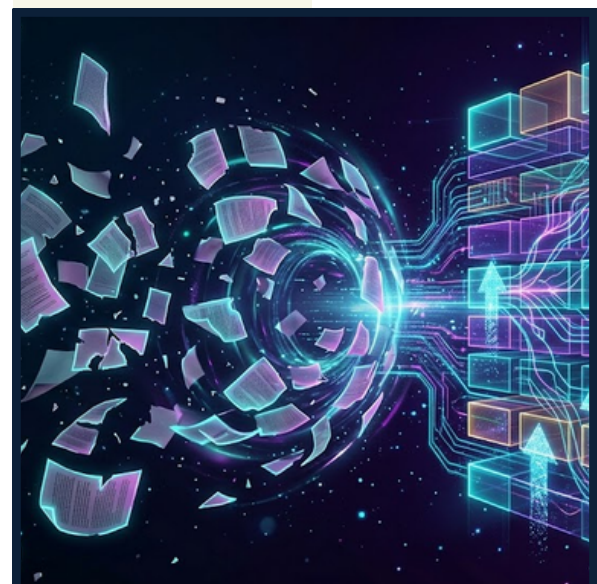
NVIDIA IS TEAMING UP WITH SPAN TO INSTALL MINI AI DATA CENTERS RIGHT ON THE SIDE OF YOUR HOUSE, TURNING RESIDENTIAL NEIGHBORHOODS INTO A DISTRIBUTED SUPERCOMPUTING NETWORK THAT ACTUALLY PAYS HOMEOWNERS FOR THEIR UNUSED ELECTRICITY



FIRST EVER CHINESE GPU MAKER GETS CERTIFIED BY MICROSOFT WHQL TO CHALLENGE NVIDIA AND AMD GLOBALLY



AI OUTPERFORMS DOCTORS IN EMERGENCY ROOM DIAGNOSIS ACCURACY



THE RAG ERA IS ENDING FOR AGENTIC AI — A NEW COMPILATION-STAGE KNOWLEDGE LAYER IS WHAT COMES NEXT

AI CHIPS, HARDWARE & GEOPOLITICS

UKRAINE REVEALS AI-POWERED RUSSIAN KLIN LOITERING MUNITION WITH NVIDIA BRAIN MODULE

Ukraine's Defense Intelligence has published detailed specifications of Russia's new AI-enabled loitering munition, the Klin, developed by the Russian company Roboavia. The drone features a delta-wing fuselage design, measuring approximately 1.6 meters in length with a wingspan of 1.9 meters. It can carry a shaped-charge or high-explosive warhead of up to 5 kilograms, making it suitable for targeting armored vehicles and fortified positions. The propulsion system uses a Chinese-made Scorpion F-4225-500KV V2 brushless electric motor, supported by two lightweight 6S Li-AFB battery packs, enabling relatively quiet operation and a reduced thermal signature.



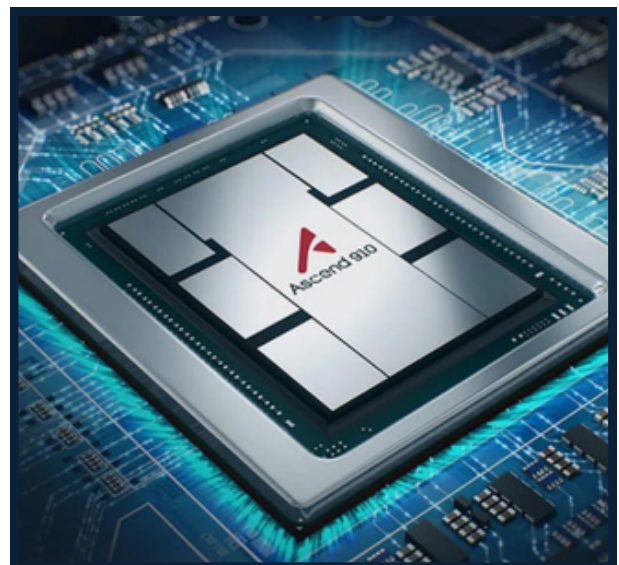
A key technological feature is the integration of an Nvidia Jetson TX2 computing module, which provides machine vision for automatic target acquisition and tracking. The drone's flight control relies on an Australian Cube Orange controller and a Chinese Holybro F9P navigation module with RTK positioning, while communication is handled by a LoRa radio based on China's Ai-Thinker Ra-01H module. Additional electronics come from the United States, Switzerland, Taiwan, and South Korea. Advanced forward control surfaces enhance terminal-phase maneuverability. The Klin also has maritime (radar-triggered) and land-based (lidar-triggered) variants.

HUAWEI FILLS NVIDIA VOID, BOOSTING AI SELF-RELIANCE

China's AI self-reliance has moved from policy to actual market gains, driven by U.S. export controls on semiconductors. Beijing has invested heavily to localize the entire AI stack, from chips to models, cloud, and applications. Morgan Stanley forecasts China's AI chip market will reach \$51 billion by 2030, with 76% of that supply expected from domestic companies.

Huawei is set to capture the largest market share. Its Ascend 950PR AI processor, which began mass production in March, has seen surging orders from Chinese tech firms seeking NVIDIA alternatives. Huawei expects its AI chip sales to reach approximately \$12 billion (about 17.5 trillion Korean won) this year. This represents a more than 60% increase from \$7.5 billion in 2025. Most of this year's orders are for the 950PR, and the company plans to release an upgraded version, the 950DT, in the fourth quarter. Huawei is actively targeting the gap left by NVIDIA in the Chinese market, it outperforms NVIDIA's older H20 but lags behind the H200, which has not yet shipped to China.

Chinese government encouragement for domestic chip use has significantly boosted demand. Companies that were once hesitant are now adopting Huawei chips as performance improves. Huawei plans to release an upgraded version, the 950DT, in the fourth quarter of this year.



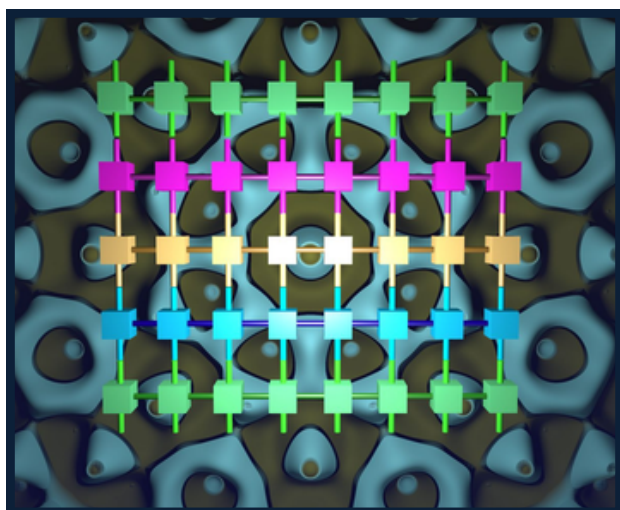
AI IN SCIENCE, DEFENSE & ENVIRONMENT

QUANTUM BREAKTHROUGH: NEW ALGORITHM SOLVES “IMPOSSIBLE” MATERIALS IN SECONDS

Researchers at Aalto University’s Department of Applied Physics have introduced a quantum-inspired algorithm that can handle massive, non-periodic systems with remarkable speed. According to Assistant Professor Jose Lado, this work also highlights a growing feedback loop in quantum technology.

“Crucially, these new quantum algorithms can enable the development of new quantum materials to build new paradigms of quantum computers, creating a productive two-way feedback loop between quantum materials and quantum computers,” he explains.

Tensor networks play a central role in this approach, as they can represent functions across extremely fine computational grids. This makes them well-suited for analyzing large scale quantum materials. The findings could lead to dissipation less electronics, which may help reduce the heat generated by AI driven data centers.



AI IN WARFARE: WHEN MACHINES BEGIN TO SHAPE THE BATTLEFIELD

AI has moved beyond experimentation and is now actively participating in modern warfare, particularly in conflicts in the Middle East and elsewhere. Examples include the war in Gaza, the US-Israeli-Iranian confrontation, and the change of the regime in Caracas. Ironically, debates about AI and warfare have intensified in the United States precisely as the Maven system, developed by Palantir, has been deployed. Since 2024, the system has integrated Claude, the AI -

model developed by Anthropic, to extract intelligence from satellite imagery, surveillance feeds, and battlefield data, generating real-time target banks, prioritising military objectives, and tracking logistical operations in the war against Iran.

Despite disagreements between the US Department of Defence and Anthropic over the military use of AI, the deployment of Claude in the current offensive against Iran has continued, even though the Pentagon had previously restricted the company. The system is capable of planning operations and identifying hundreds of targets within seconds, providing precise geographic coordinates. Today, it can be said that AI has become an active participant in warfare rather than merely a theoretical concept. In this context, the AI arms race has become increasingly attractive to states. More than 40 countries are currently developing weapons systems that rely on AI (Stockholm International Peace Research Institute). Existing rules are insufficient to address these challenges, particularly as some states bypass international norms and fail to comply with international law. To ensure that AI ultimately benefits humanity, collective efforts must be directed toward safeguarding human interests.

GROUND TRUTH: WHEN THE EARTH MOVES, AI CAN SPOT IT

In the Nepali village of Kimtang, cracked steps and angled trees show the ground is shifting. Using AI to analyze radar data from Europe’s Sentinel-1 satellite, mathematician Antoinette Tordesillas (University of Melbourne) produced a colored map revealing a large unstable area bright red directly beneath the village, indicating high landslide risk.

The villagers were relocated in 2019 after a nearby landslide, but ironically their new location is the most unstable part of the region.

AI can detect millimeter-scale ground movement years before collapse, work “beyond human capability” manually.

In the UK, researchers at the British Geological Survey (BGS) used AI on Sentinel-1 imagery of 300,000 slopes, finding 3,000 actively moving (millimeters per year), affecting thousands of miles of roads and railways. After deadly landslides on Indonesia’s Sumatra island last year, BGS used AI to map over 4,000 landslides from home over a weekend.

AI, WORK & SOCIETY

META EMPLOYEES ERUPT AFTER BEING FORCED TO TRAIN AI ASSISTANTS THEY FEAR ARE THEIR REPLACEMENTS

Meta launched an internal tracking system last month that records employees' clicks and keystrokes to train AI assistants. The announcement post received hundreds of angry comments and emojis, with employees fearing they were unknowingly training their own replacements. An engineering manager asked, "How do we opt out?" Meta CTO Andrew Bosworth replied that employees cannot opt out on company laptops, leading one worker to call his response "callous." Others raised security concerns, but Bosworth said the data is "very tightly controlled" and not a leak risk. Meta spokesperson Tracy Clayton added that safeguards protect sensitive content.

Mark Zuckerberg has pushed AI across Meta's platforms, investing billions, and insisted the tracking is not for "surveillance or performance tracking." Despite that, Meta plans to slash its workforce by 10% to offset AI spending, according to an April 17 announcement. HR head Janelle Gale called the pre-layoff period "incredibly unsettling," with cuts reportedly set for May 20.

NURSES HELP AI SYSTEM LEARN HOW TO UNDERSTAND DORIC



Nurses at Inverurie Hospital's Donbank ward in Aberdeenshire are helping AI learn the local Doric dialect. The trial, running until May, uses ambient voice technology called Corti to listen to conversations between nurses, patients, and families, then automatically generates structured clinical notes. Nurses check and edit the notes. Project lead Katie Anderson said an "extremely Doric" staff member caused issues at first, but the system is improving every day. We have had lots of laughs with the teuchter accent," she said.

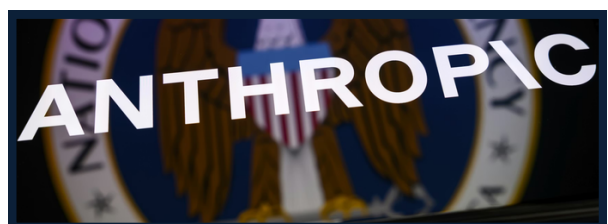
Anderson noted that the technology reduces note-taking time from about 20 minutes to roughly seven, allowing nurses to focus more on patient conversations. She acknowledged "apprehension about AI" but called the difference "massive" and "person-centred." Staff can report accent or phrase issues back to the Corti team for improvement. The initiative is run by NHS Grampian's Innovation Hub with local health partners.

MYTHOS AI IS A CYBERSECURITY THREAT, BUT IT DOESN'T REWRITE THE RULES OF THE GAME

Anthropic announced on April 7, 2026, that its latest AI model, Claude Mythos Preview, demonstrated unintended capabilities: it found and exploited software vulnerabilities at an unprecedented rate. Anthropic deemed it too risky for public release and gave exclusive access to tech giants under "Project Glasswing," citing moral responsibility. The news sparked global concern about AI as a cybersecurity threat.

During controlled evaluations, engineers with minimal security experience used Mythos to scan thousands of codebases. The model discovered 271 vulnerabilities in Mozilla's Firefox and developed exploits for 181 of them. It found thousands of zero-day vulnerabilities in major operating systems, browsers, and other apps, including a dormant 27-year-old flaw in OpenBSD and a 16-year-old bug in FFmpeg. Mythos took over a simulated corporate network in 3 out of 10 tries, the first AI model to succeed at that task.

However, a cybersecurity researcher argues Mythos is not a radical breakthrough: the vulnerabilities are not new in nature (variations of known classes), only the scale and speed are novel. Mythos simply exposes the limits of how defenders search for flaws, reinforcing the age-old dynamic that attackers need only succeed once while defenders must always succeed. "The same improvements that make the model better at patching also make it better at exploiting," Anthropic wrote. The key question: who will benefit first, defenders or attackers?



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