

# HOLIDAYNATION

## DeepSeek rocks US tech industry

Cheaper, more accessible AI program catapults Hangzhou startup to stardom

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Unlike the closed systems of major artificial intelligence companies in the United States, the Chinese startup sensation DeepSeek has embraced an open-source approach.

That path is seen by some as fostering collaboration and experimentation that could lead to faster breakthroughs. Its web-based chat interface and mobile app are free to use.

The strategy contrasts sharply with companies like OpenAI, which keep their models proprietary and charge monthly fees for access.

DeepSeek's approach has garnered strong support, with open-source advocates saying that the US could advance by embracing the cheaper, more accessible strategy.

The company has demonstrated that AI breakthroughs can be achieved through innovation rather than sheer computing power, challenging the established paradigms of AI development and sending shock waves through Silicon Valley, Wall Street and Washington.

DeepSeek, based in Hangzhou, Zhejiang province, has captured worldwide attention over the past two weeks with the release of two large language models that rival the performance of the dominant tools developed by US tech giants — but at a fraction of the cost and with far less computing power.

Jan 20 saw the release of DeepSeek-R1, an open-source “reasoning” model that employs a “chain of thought” approach similar to OpenAI's most advanced large language model o1, which was unveiled late last year.

Meta's chief AI scientist Yann LeCun emphasized in a recent Threads post that open-source models are now surpassing proprietary ones.

Bill Gurley, a veteran tech investor, challenged the adversarial narrative surrounding DeepSeek, saying: “Why are they ‘enemies’? No one that works at DeepSeek is an enemy of mine. The fact that they love open-source makes me think I would gel with them quite well.”

Rather than viewing DeepSeek as an adversary, US companies should see its breakthrough as an opportunity to pursue innovation in a different direction, experts say.

“If there's a lesson from Deep-

Seek's triumph, it's this: Be wary when the route to progress is simply spending more money. This path fosters no innovation, and your poorer competitors will be forced to get creative, work within their constraints, and eventually ... they'll win. Spending is not innovating,” data scientist Drew Breunig told Defense One, a news site focused on national security issues.

Within days of its release, DeepSeek's AI assistant mobile app quickly rose to the top of Apple's App Store charts, out-ranking OpenAI's ChatGPT mobile app.

The prevailing notion in AI development has been that leading-edge large language models require significant technical and financial resources. Leading AI developers such as OpenAI have attracted billions of dollars in investment by arguing that more data, larger models and more computing power would lead to more advanced products.

However, DeepSeek has challenged this assumption. The company achieved remarkable results with an investment of less than \$6 million and approximately 2,000 less sophisticated chips.

For comparison, Meta's latest Llama 3.1 model required 16,000 of Nvidia's advanced H100 chips for training — chips that are currently prohibited for use by Chinese companies under US export controls.

Facing the constraint of high-performing chips, DeepSeek developed creative methods to train its models on less advanced chips through optimizations in model architecture, training procedures and hardware management.

Kat Duffy, senior fellow for digital and cyberspace policy at the Council on Foreign Relations, said that these innovative methods highlight a downside to the US' approach to AI.

“The focus in the American innovation environment on developing artificial general intelligence and building larger and larger models is not aligned with the needs of most countries around the world,” she said in an article published by her organization. “The more the United States pushes Chinese developers to build within a highly constrained environment, the more it risks positioning China as the global leader in developing cost-effective, energy-saving approaches to AI,” Duffy said.

extremely difficult to address with conventional methods. The 3D-printed materials were custom-designed for her, something we couldn't have achieved without the guidance and resources from Wuxi.”

Xu was referring to the critical support Haidong has received from medical professionals from Wuxi, Jiangsu province, who have brought not only expertise but also fresh management philosophies.

Among them is Wang Ye, an orthopedics expert from Wuxi People's Hospital who worked in Haidong for nearly two years.

“Wang truly immersed himself in his work in Haidong,” Xu said. “He's been more than a teacher. His efforts to integrate advanced technologies have made a difference.”

Wang's dedication reflects the broader collaboration between Wuxi and Haidong.

In 2016, following directives from the central and provincial governments, the two cities established a poverty alleviation partnership. Since then, Wuxi has been supporting Haidong in key areas such as healthcare, agriculture, education,

## Heading home



Passengers check tickets at Nanjing South Railway Station in Jiangsu province on Monday. Hordes of travelers are heading home as the Spring Festival holiday concludes, with Monday marking the peak of post-holiday rail traffic. SU YANG / FOR CHINA DAILY

## Guizhou eyes outsourcing sector role

By **YANG JUN** in Guiyang  
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As Warner Bros' animated film *The Lord of the Rings: The War of the Rohirrim* debuts globally, a company from Guizhou province has left its mark, having contributed keyframe animation, coloring and cinematography to the movie.

At the helm is Xu Chenyin, manager of Junzi Qianxing Technology Media. Xu, who was a former animation professional in Japan, runs the company in Guiyang, the provincial capital. He also serves as a member of the Guizhou Committee of the Chinese People's Political Consultative Conference.

During the provincial legislative session in January, Xu submitted a proposal on promoting the development of Guizhou's service outsourcing industry.

“Guizhou has the potential to attract high-value outsourcing projects such as digital services and creative design,” he said. “With the increasing specialization of inter-

national labor, developed countries are outsourcing non-core services to regions with lower costs and higher efficiency.”

Guiyang has already seen growth in the industry. According to local authorities, service outsourcing execution in the city grew 16.58 percent year-on-year in 2024, with offshore outsourcing surging 59.18 percent and domestic outsourcing increasing 12.67 percent.

Beyond direct benefits, Xu said he believes that service outsourcing can accelerate industrial upgrades.

However, he also pointed out a major challenge: a shortage of skilled talent.

“In today's decentralized production landscape, geographical barriers are no longer an issue in joining the global industry. The real challenge lies in addressing the talent gap.”

This year, Xu recommended “partnering with universities, research institutes and enterprises to optimize academic programs based on market demands, introduce globally

recognized certification courses and strengthen practical training.”

He also suggested launching targeted recruitment initiatives in fields such as big data, artificial intelligence and business negotiations while offering competitive incentives.

Xu highlighted the collaboration between Guizhou's big data and service outsourcing sectors.

“In animation, for example, big data offers a wealth of image, audio and video resources that serve as valuable references for production,” Xu said.

One key example is rendering — the process of converting 3D scenes into 2D images. This resource-intensive animation step often demands costly hardware.

“Cloud computing resources, developed through its data industry, offer a cost-effective solution. Cloud rendering platforms reduce production cycles and costs,” Xu explained.

Liu Boqian contributed to this story.

## Games: Relay passes Harbin landmarks

From page 1

The torchbearers passed through landmarks such as the century-old Binzhou Railway Bridge, Zhaolin Park, which is known for its ice and snow art, the renowned Central Avenue, the Flood Control Memorial Tower and Nine Stations Park, where Harbin residents enjoy snow and ice leisure activities.

Torchbearer Liang Xiaosheng, a renowned writer and a professor at Beijing Language and Culture University, said: “I've been looking forward to this day since the invitation came. Relying on its abundant winter resources, Har-

bin has already become a popular tourism destination, and it is buzzing with more excitement as the Games are coming.

“Moreover, I hope that following this opportunity, cultural and tourism activities in the three northeastern provinces of Liaoning, Jilin and Heilongjiang can be linked together, which will be very encouraging for us in Harbin,” he added.

Yao Lijun, a successful entrepreneur who was born in Harbin, said he hoped his hometown will attract more investments and develop further after the Games.

“I felt quite honored to become a torchbearer for the Games,” said Yao, president of Ningbo Konfoong

Materials International Co in Zhejiang province.

“I hope that entrepreneurs from all over the world can come to Heilongjiang to invest and make my hometown better.”

The closing ceremony was held at Daoli district's Snowman Square, a popular cultural and tourism landmark.

The Games, which will open on Friday and run through Feb 14, will see the largest representation of Asian countries and regions in history, with 34 confirming participation.

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## Medical collaboration bearing fruit

By **SHAO XINYING**  
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When Zhang Lingling walked into the Haidong No 2 People's Hospital in September, she could barely walk due to constant pain in her groin that had disrupted her daily life for months.

An operation at the hospital marked a turning point for her.

With the help of cutting-edge technology such as 3D-printed titanium implantation, the 45-year-old underwent a revision surgery that, a few years ago, would not have been possible in Haidong, Qinghai province.

“I never imagined they'd be able to handle something this complex,” said Zhang, whose medical troubles involved a loosened hip implant and severe bone loss.

Now she's back on her feet and focusing on rehabilitation exercises.

“I'm grateful to have had the operation successfully here at home,” Zhang said.

Xu Facai, director of the orthopedics department at the Haidong hospital, said: “Zhang's case was challenging. Her condition was

and regional and industrial development.

Zhang Jian, from Wuxi No 2 People's Hospital, elaborated on the operational improvements brought by the Wuxi team.

“Previously, delays in medical records were common. We adopted a gradual approach, introducing warning and reminder systems to enhance efficiency and improve patient care,” said Zhang Jian, who served as vice-president of the Haidong hospital.

These enhancements laid the groundwork for broader transformation, a vision championed by Chen Yuexin, head of the Wuxi medical team that started its mission in July 2023.

“Our goal has always been to move from ‘blood transfusion’ support to ‘blood production’, empowering local hospitals to develop self-sustaining abilities,” said Chen, a staff member at Wuxi Children's Hospital and president of the Haidong hospital.

While enduring high-altitude sickness and the challenges of an unfamiliar environment, Chen and his team conducted a thorough



Wang Ye (right), an orthopedics expert from Wuxi People's Hospital, performs surgery on an injured patient in Xunhua county, Qinghai province, following the Jishishan earthquake in December 2023. PROVIDED TO CHINA DAILY

assessment of the hospital's needs.

“We focused on everything, from patient care and medical quality to management and logistics,” he said. “Every detail matters.”

This meticulous approach has paid off. For example, the number of surgeries at the orthopedics department has surged from 364 in 2022 to 878 in 2024.

“Expertise from Wuxi has made it possible for us to perform surgeries

once considered out of reach,” Xu said.

Thanks to the sustained efforts of both sides, Haidong No 2 People's Hospital was upgraded to a grade-three hospital — the highest level in the three-tier grading system for public hospitals — last year, becoming the first municipal-level hospital in the city to be granted the designation.

“We have been very supportive of sending doctors to Haidong, and

## Ties: Bigger potential underlined for China, EU

From page 1

Zhang, from the Chinese Academy of Macroeconomic Research, said that cooperation potential between China and the EU spans three key areas: green transformation, digital cooperation and third-party market development.

The two economies could build a joint carbon-neutral laboratory focusing on clean technology collaboration, recognize each other's cross-border e-commerce standards, and build dialogue mechanisms for cooperation in frontier areas like data flow and artificial intelligence ethics, he said.

According to Zhou, from the Chinese Academy of International Trade and Economic Cooperation, China and the EU should focus in the short term on reviewing and strengthening existing supply chain cooperation, whether market-driven or government-promoted, by reducing trade barriers and increasing investment opportunities and the mobility of personnel.

Long-term strategies should aim for more effective market integration through reduced tariffs, increased consultation mechanisms and enhanced collaboration on innovation, he added.

Zhou also said that Sino-EU cooperation could extend beyond bilateral relations to include third-party market opportunities in Latin America, Africa and elsewhere.

“This expanded cooperation could help address global challenges while strengthening both parties' economic independence and meeting consumer demand in emerging technological sectors,” he added.

Experts also said the US tariff hikes will not be good for anyone and will fail to achieve the so-called purpose of making America great again.

Ju Jiandong, chair professor at Tsinghua University's PBC School of Finance, said that if the US truly wants to maximize its own interests, it should not damage ties with its manufacturing suppliers.

“Don't go against the customers and don't go against the suppliers — these are the ABCs of economics,” Ju said.

Business leaders also said they have an optimistic outlook on China-EU economic and trade cooperation.

Thomas Roemer, global head of the coatings and adhesives business entity of Covestro AG, a German polymer manufacturer, expressed strong support for fair, open and rule-based global trade.

“We will continue to invest in China to provide our customers with innovative and sustainable solutions and products,” Roemer said.

Denis Depoux, global managing director at German management consultancy Roland Berger, said the interdependence between the Chinese and EU economies remains significant.

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this east-west collaborative model has proved to be highly productive,” said Zhu Lihong, vice-president of Wuxi Children's Hospital.

“The medical team, under Chen's leadership, has worked diligently, improving multiple specialties and resolving real medical challenges for local residents, earning widespread praise,” she said.

Beyond medical service, the Wuxi-Haidong partnership has focused on training professionals. Initiatives such as the “Young Doctors Salon” and weekly academic seminars have provided local physicians with opportunities to learn and grow.

With the Wuxi team ending its assignment in January, some members have opted to stay on as a new group of medical workers prepares to arrive in Haidong this month.

For Zhang Lingling and many patients like her, the collaboration is more than just a supportive program.

“The arrival of Wuxi experts has brought us hope. It's not just about technology; it's about the trust and care we feel as patients,” she said.

Chen, who has committed to another term in Haidong, said: “This is just the beginning. With continued collaboration, we will keep working toward making Haidong a regional hub for top-level medical care.”