AI Public Goods for Global South: CAICT and BRICS AI Center in Action

WU Tongning

China—BRICS AI Center/ CAICT

October 2026

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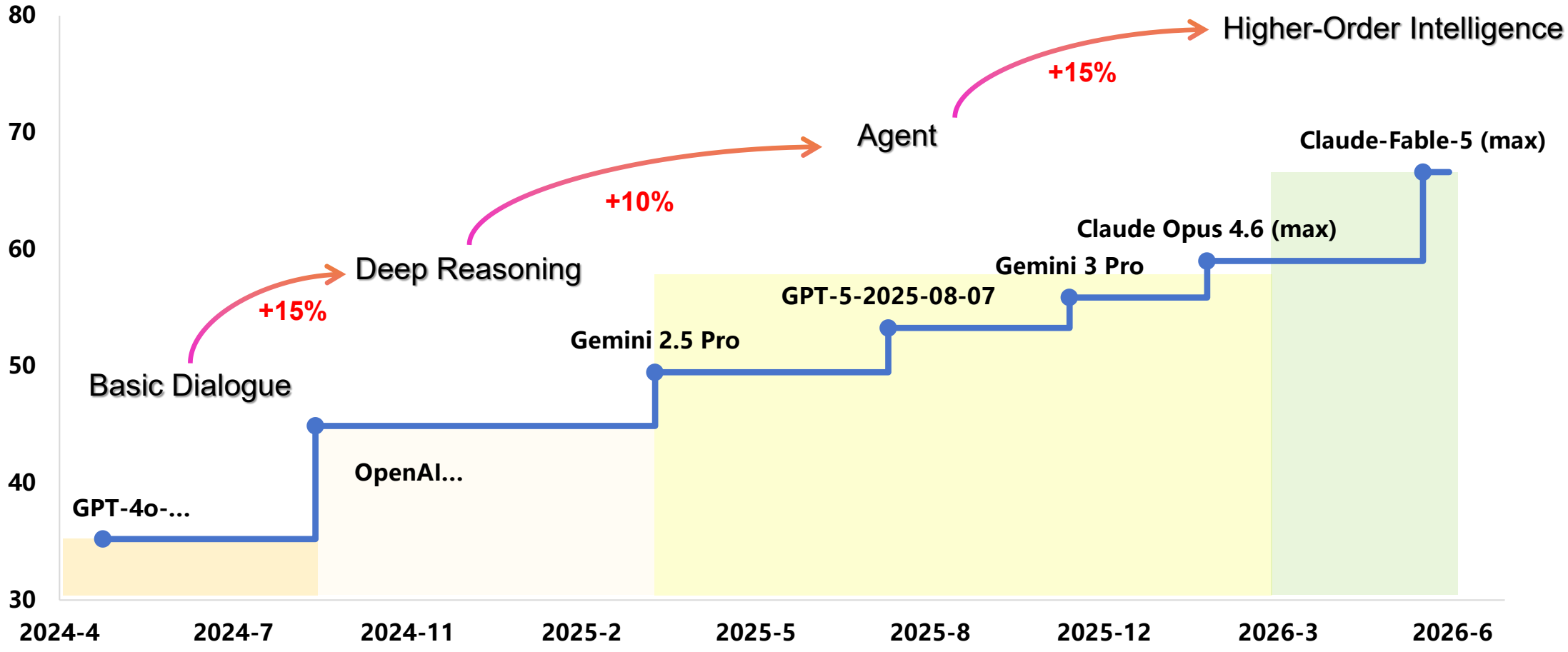
1. Shared and Inclusive Growth is Essential for Global AI Development

2. Actions by CAICT and China-BRICS AI Center

AI Capabilities Are Advancing at an Accelerating Pace

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Foundation models are rapidly evolving from dialogue and reasoning toward agents and higher-order intelligence, continuously expanding the boundaries of AI capabilities.



Source: Calculated based on composite scores from CAICT's Fangsheng Evaluation.

Open-source Models Are Lowering the Barriers to AI Diffusion

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As capabilities advance, open-source ecosystems are turning model innovation into reusable infrastructure and accelerating the global diffusion of AI.

"Technology open source + ecosystem co-construction" promotes the popularization of general models

Open source has accelerated global diffusion. The download of DeepSeek-R1 has exceeded 10 million times, and the download of the Qwen series models has exceeded 180 million times, with a total of 90,000 derivative models.

Open weights as ecosystem strategy

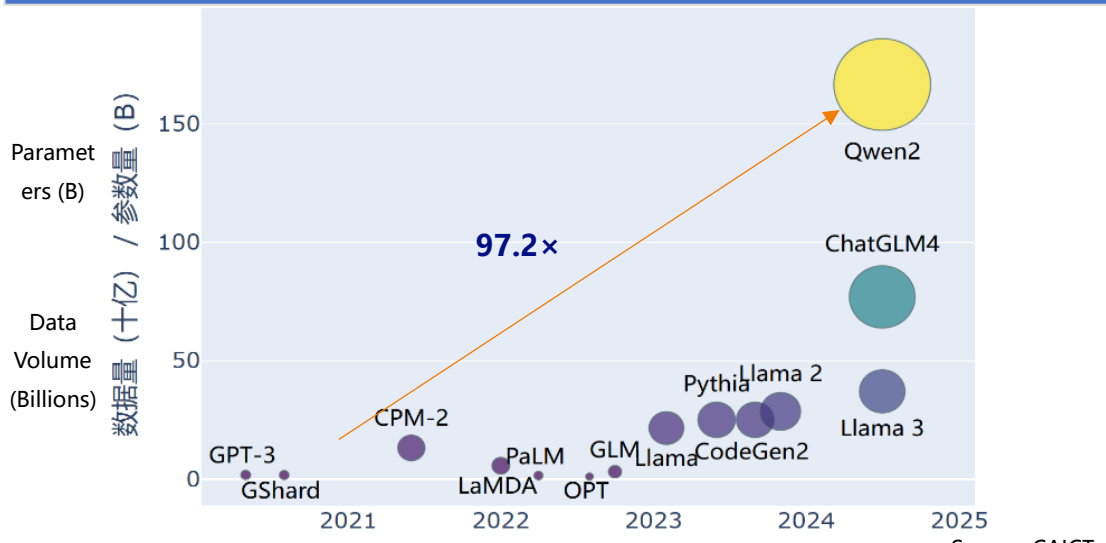
- Secondary development
- Commercial deployment
- Cloud & chip adaptation
- API and ecosystem reach

The “Data Wall” is Becoming a Critical Constraint on AI Development

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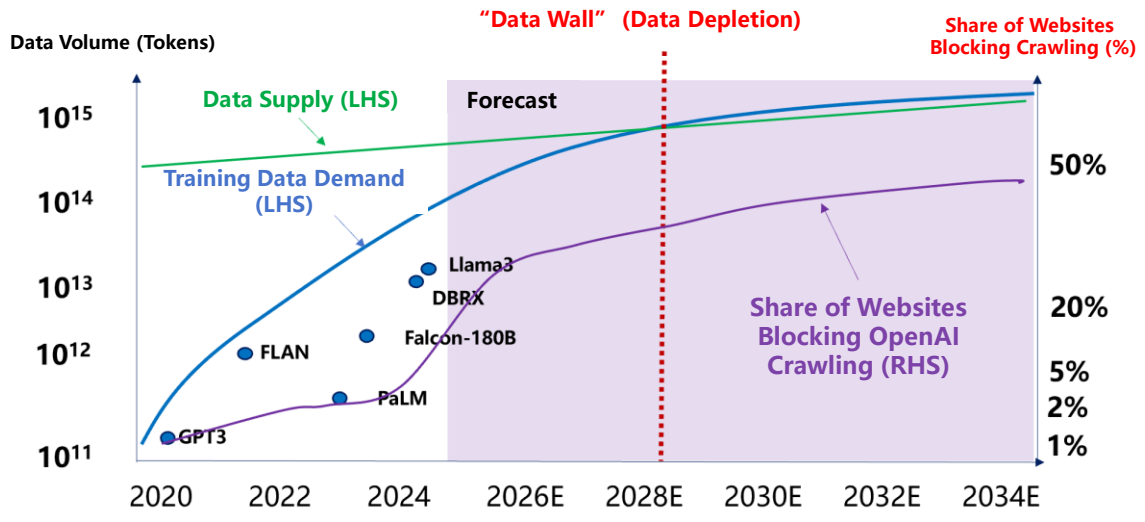
- **As demand for training data continues to surge, the limited supply of high-quality data is becoming a critical bottleneck. Breaking the “Data Wall” requires next-generation data engineering across design, collection, cleaning, augmentation, annotation, quality control and trustworthy operations.**

Data Inputs for Foundation Model Training Continue to Grow Rapidly



Source: CAICT

High-Quality Training Data Could Be Depleted by 2028, While Restrictions on Web Crawling Continue to Rise



Source: CAICT

Data Design → Data Collection → Data Cleaning → Data Augmentation → Data Annotation → Quality Inspection → Data Operation

There is an Urgent Need to Establish an AI-oriented Data Engineering System

- **Management System**
- **Development & Maintenance**
- **Quality Control**
- **Resource Operation**
- **Compliance & Trustworthiness**

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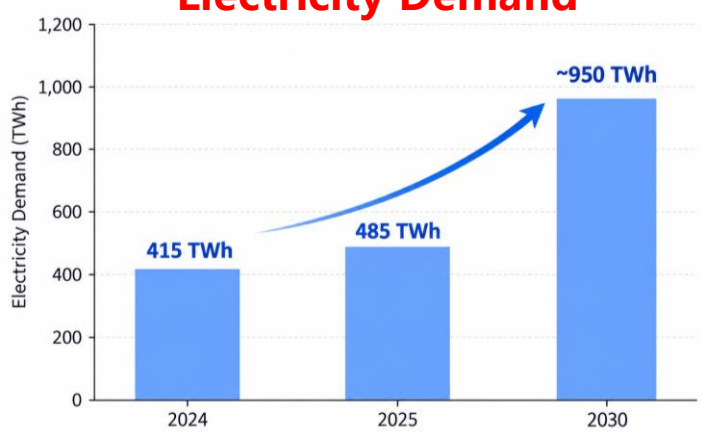
Compute and Energy Are Creating a New Infrastructure Divide

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- **A similar challenge is emerging in computing infrastructure, where access remains highly concentrated while inference and electricity demand continue to rise.**

Inference is Becoming the Dominant Workload, with Rising Pressure on Data-Center Electricity Demand

Global Data-Center Electricity Demand



Source: IEA, Energy and AI (2025); Key Questions on Energy and AI (2026).

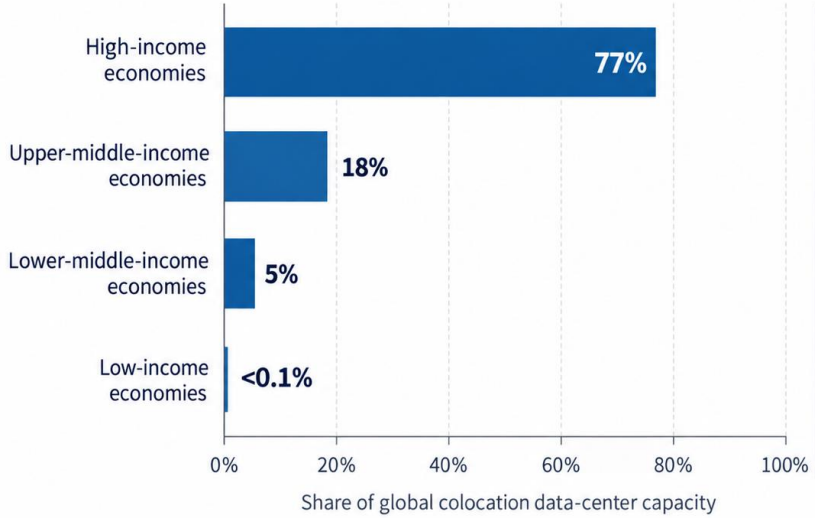
AI inference demand is projected to grow from 20.9 GW to 93.3 GW by 2030, overtaking training as the dominant AI workload.

Uneven access to compute, rapidly expanding inference workloads and rising electricity demand are turning AI infrastructure into a new dimension of the global digital divide.

Global Compute Capacity Remains Highly Concentrated

Global Colocation Data-Center Capacity by Income Group, 2025

Compute capacity remains highly concentrated in high-income economies.



86%
of TOP500 HPC systems
located in high-income economies.

97%
of total TOP500 computing capacity
located in high-income economies.

Source: World Bank, Digital Progress and Trends Report 2025: Strengthening AI Foundations.

Compute is emerging as a new infrastructure divide. High-income economies dominate data-center and high-performance computing capacity, limiting the ability of many developing economies to independently develop and deploy advanced AI.

AI Breakthroughs Are Already Creating New Public Value

Despite these constraints, AI is already translating technological progress into tangible gains in creativity, coding and complex task execution.

Coding: Capable of autonomously advancing the migration and reproduction of complex, large-scale systems.

GLM-5.2, in the Moonshot experiment, completed a Rust-based reproduction of the Apollo 11 AGC (Apollo Guidance Computer). The Agent accomplished this autonomously within hours - a task that would otherwise have taken humans one to two weeks.

Video Generation: LLM demonstrates coherence and rationality in motion modeling.

Seedance 2.0 can generate videos with resolutions up to 1080P based on prompts, with a maximum duration of 3 minutes, enhancing content production efficiency in film and television creation.

AI is Accelerating the Scientific Discovery Cycle

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The value of AI extends beyond productivity. It is reshaping how scientific knowledge is generated, tested and translated across disciplines.

AI

+

Scientific research

Data-driven approaches expand the boundaries of cognition

- Massive data aggregation and analysis
- Expand cognitive dimensions

Intelligent analysis enhances research efficiency

- Automated experiments
- Intelligent data processing and simulation
- Knowledge management

Knowledge discovery drives theoretical innovation

- Scientific hypothesis generation and validation
- Scientific model construction and optimization
- Interdisciplinary knowledge integration and innovation

+

- **Biology**
- **Pharmaceuticals**
- **Simulation**
- **Materials**
- **Meteorology**
- **……**

Case study: protein prediction

AI protein prediction technologies (such as DeepMind AlphaFold3) use deep learning algorithms to precisely analyze the three-dimensional structure and function of proteins, reconstruct amino acid folding pathways with atomic-level precision, and accelerate drug development, disease mechanism analysis, and innovation in synthetic biology, significantly improving life science research efficiency.

Frontier Progress Does Not Eliminate Fundamental Capability Gaps

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➢ **At the same time, stronger models still face limits in precision, causal reasoning, physical understanding and industrial robustness.**

Capability gaps exist in logical computation, numerical statistics, understanding of physical laws, and robustness

- Tokenization mechanism flaws: Large models' tokenization and embeddings (encoding tokens into vectors) are prone to precision deviations.

Moravec's Paradox: Reasoning (which is high-level in humans) requires very little computation, but sensorimotor skills and intuition (comparatively low-level in humans) require enormous computational resources.

Still cannot meet the requirements for core manufacturing applications, which cannot be simply addressed by "larger models"

- Cannot fully meet the "hardcore" task requirements of industrial applications, such as high-precision calculations, strict physical constraints, high reliability, and deep domain knowledge

Insufficient causal reasoning capability in complex industrial scenarios	Lacks industrial-grade precise numerical computation ability
Insufficient understanding and processing capability for process knowledge and engineering semantics	Challenges in real-time analysis and lightweight on-site deployment

Solow Paradox: "You can see the computer age everywhere but in the productivity statistics."

- Robert Solow, 1987

The AI Divide is Triggering a New Great Divergence

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Rapid AI development is creating deep and mutually reinforcing international gaps that could reverse decades of convergence and open a new era of global divergence.

Capability Gap

Innovation resources are concentrating in a few high-income economies, creating a self-reinforcing Matthew Effect.

- High-income economies, home to just 17% of the world's population, account for 87% of notable AI models, 86% of AI start-ups and 91% of AI venture capital.
- In 2025, AI private investment flowing to the United States was 48.5 times that of the United Kingdom.
- Top AI researchers are heavily concentrated in the United States, while many developing countries face severe talent outflows.

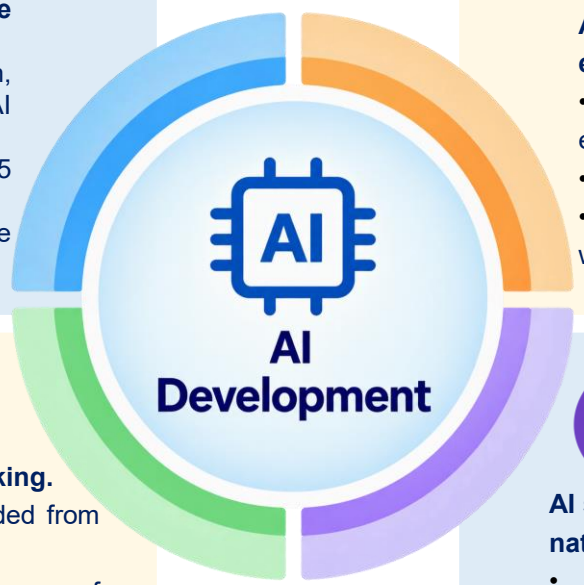
Source: World Bank, Digital Progress and Trends Report 2025: Strengthening AI Foundations. , Stanford HAI, AI Index Report 2026

Economic Gap

AI adoption and benefits are distributed highly unevenly, widening economic inequalities between the Global North and Global South.

- In the second half of 2025, generative AI adoption reached 24.7% in advanced economies, nearly double the 14.1% in emerging economies.
- The adoption gap widened from 9.8 to 10.6 percentage points within the year.
- Developing economies risk being locked into low-value data-processing roles while most value is captured by firms controlling data, compute and algorithms.

Source: Microsoft AI Economy Institute, Global AI Adoption in 2025



Governance Gap

The global South is being structurally underrepresented in AI rule-making.

- 118 countries, most of them from the Global South, are largely excluded from substantive AI governance discussions.
- In major international AI governance platforms, the average voting power of Global South countries is only about one-third that of advanced economies.
- Existing rules focus more on developed-country standards and market needs, while giving limited attention to technology transfer and digital infrastructure support.

Source: UN Advisory Body on AI, Governing AI for Humanity, 2025

Safety & Ethics Gap

AI safety and ethics governance is lagging behind technological change, while national approaches remain fragmented.

- The international AI safety landscape is becoming bloc-based, limiting effective cooperation among major actors.
- Training data is dominated by a few major languages, creating risks of linguistic and cultural marginalization and strengthening demands for sovereign AI.

Source: World Bank World Development Report 2026

The emerging AI divide is increasingly a capability divide — between those who can access AI and those who can effectively develop, shape, govern and benefit from it.

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China’s Contribution to Global AI Development and Governance

China is committed to a people-centered approach and to developing AI for the positive and for good, actively engages in AI Governance within the UN Framework, and contributes to Global Inclusive AI Development.

NOV, 2022

China released the **Position Paper of China on Strengthening Ethical Governance of Artificial Intelligence**, advocating a people-centered approach and the development of AI for good.

OCT, 2023

At the Third Belt and Road Forum for International Cooperation, President Xi Jinping announced **China’s Global AI Governance Initiative.**

JUL, 2024

The 2024 World AI Conference and High-Level Meeting on Global AI Governance released the **Shanghai Declaration on Global AI Governance.**

SEP, 2024

At the High-Level Meeting on International Cooperation for AI Capacity Building held at UN Headquarters, China proposed the **AI Capacity-Building Action Plan for Good and for All.**

OCT, 2024

At the 16th BRICS Summit, President Xi Jinping announced: “China has recently established the **China-BRICS Artificial Intelligence Development and Cooperation Center.** We are ready to deepen innovation cooperation with all parties and unleash the potential of AI.”

JUL, 2025

The 2025 World AI Conference and High-Level Meeting on Global AI Governance released the **Global AI Governance Action Plan.**

SEP, 2025

China proposed the **AI+ International Cooperation Initiative** at a high-level meeting on the Global Development Initiative, calling on all countries to carry out AI+ campaigns, enhance policy exchange and practical cooperation, and share best practices and solutions.

JUL, 2026

During the 2026 World AI Conference and High-Level Meeting on Global AI Governance, the **World Artificial Intelligence Cooperation Organization (WAICO)** was officially established with 29 founding members to promote international cooperation, capacity building, and shared AI development.

China actively participates in multilateral /bilateral AI cooperations

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On one hand, multilateral cooperation frameworks are continuously improving, and international organizations are setting up new mechanisms to create platforms for equal exchange. On the other hand, regional and bilateral cooperation are advancing in a complementary way, helping to build international consensus on AI security governance.

Promoting new international dialogue mechanism



- **The United Nations** established the **Independent International Scientific Panel on AI**, and launched the **Global Dialogue on AI Governance.**



- During the "AI for Good" Standards Day, ITU-T SG17 hosted an **AI Safety Workshop** to promote international standardization of AI safety.

Building multilateral cooperation mechanisms between countries



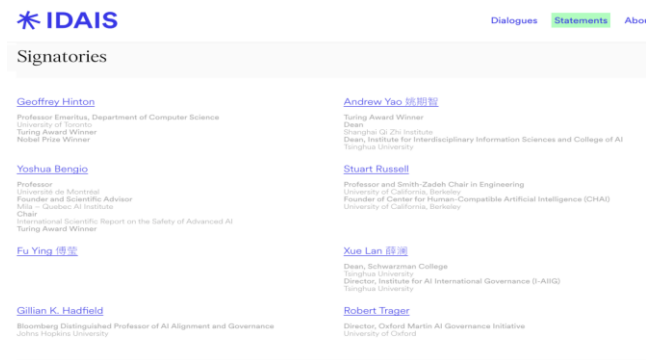
- **The global summit** builds channels for international exchange and boosts the diversity of the AI ecosystem.



- **Multilateral** cooperation mechanisms established internationally to explore new AI collaboration models.

Driving the formation of governance consensus among Industry, academia, and research





- **Top international scientists** are spearheading cutting-edge AI safety collaboration, co-signing the "Shanghai Consensus" and **calling for clear red lines for AI behavior.**

CAICT Mission and Vision

1957
China Academy of Posts and Telecommunications of the former Ministry of Posts and Telecommunications

1994
China Academy of Telecommunication Scientific Research and Planning of the former Ministry of Posts and Telecommunications

1998
China Academy of Telecommunication Research of the former Ministry of Information Industry

2008
China Academy of Telecommunication Research of the Ministry of Industry and Information Technology

2014
China Academy of Information and Communications Technology

MisSION	**Think-tank and enabler for innovation and development in the information society**
POSITIONING	**Top specialized think-tank for the government, innovation and development platform for the industry**
VisION	**Develop into a first-class comprehensive institute for the information and communications industry**
CORE VALUES	**Boosting prosperity with virtues and expertise**

AI Research Institute: Mission & Positioning

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Serving the National Strategic Blueprint for AI Development
Strengthening top-level design and decision-making support for AI

Independent Innovation	Application-Driven	Ecosystem Synergy	Open & Win-Win	Secure & Controllable
Building First-Class Institutional Capacity to Support Technological Innovation, Large-Scale Application, and Secure Governance	Conducting research on AI engineering, advancing the engineering and scalable application of AI.	Leading the China Artificial Intelligence Industry Development Alliance (AIIA) to foster ecosystem synergy.	Establishing the National AI Center and the ASEAN AI Center, while promoting international cooperation.	Building Security & Ethics Framework for Foundation Models. Developing AI products and services with scenario-based applications.

Establishing a General Institute for AI Industry Research

Key Platforms & Carriers

- MIIT AI Standards Technical Committee
- MIIT Key Laboratory for AI Foundation Models and Software/Hardware Evaluation
- China-BRICS AI Development and Cooperation Center
- China-ASEAN AI Industry Innovation Center
- China Artificial Intelligence Industry Alliance

Building an International AI Ecosystem through Two Major Cooperation Platforms

President Xi Jinping has pointed out that artificial intelligence should be an international public good that benefits humanity. Leveraging the China-BRICS AI Center and the China-ASEAN AI Center as two major cooperation platforms, CAICT is building an international AI cooperation ecosystem focused on emerging markets.

Two Platforms

China-BRICS Artificial Intelligence Development and Cooperation Center



China-ASEAN Artificial Intelligence Industry Innovation Center



Core Capabilities

Ecosystem Public Goods

- Strengthening coordination and alignment of international mechanisms and rules

Industry Public Goods

- Promoting coordinated global expansion across the AI industrial chain

Infrastructure Public Goods

- Building overseas AI ecosystem hubs

Compliance Public Goods

- Providing international legal and compliance support

International Capacity Building and Knowledge Exchange

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- **CAICT translates international cooperation into sustained capacity-building services through training, knowledge sharing, technical exchange and practical support for countries at different stages of AI development.**

Supporting the AI for Good Global Summit under the UN framework, and soliciting and releasing AI for Good case reports







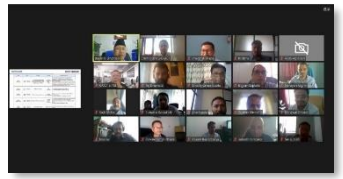
Providing Capacity Building for Global South Countries



















5,000+ participants | 92 countries

- 🏅 ITU Academy Training Center (only one in China / 14 globally)
- 🚀 Innovation and Entrepreneurship Alliance Global Acceleration Center (only one in China / 3 globally)
- 🌳 “Tree of SCO” Training Program
- 🌏 Asia-Pacific Telecommunity Training Center in China

From Global Resources to Intelligent Services

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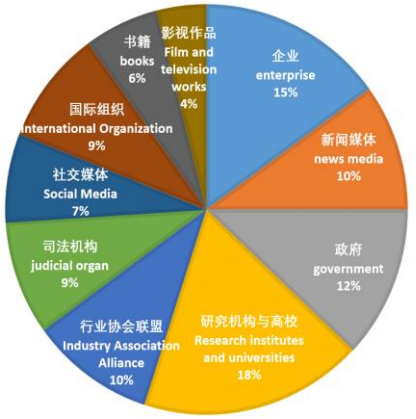
- **Through international cooperation platforms, fragmented global resources and country-specific knowledge are transformed into reusable AI public goods and intelligent services, making international cooperation more accessible to small and medium-sized enterprises.**

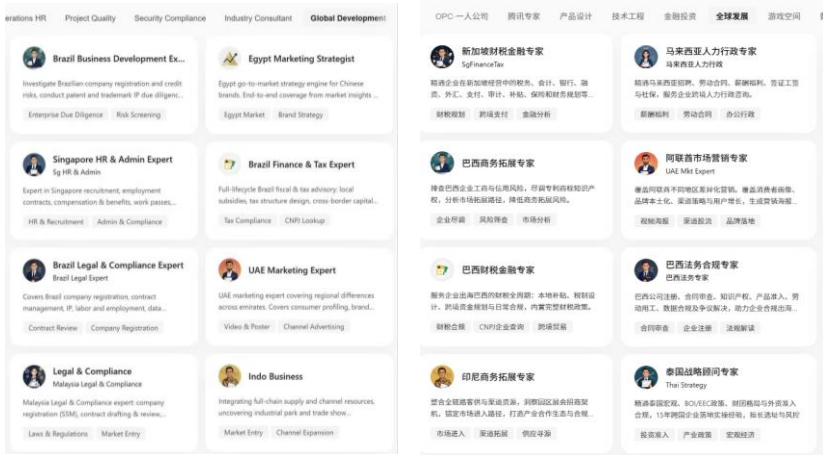


Launched in July 2026, the AI International Public Goods Repository brings together more than 50 outstanding AI products and public-service resources across infrastructure, industry applications and smart hardware. Proven AI capabilities are made easier to discover, reuse and connect with international cooperation opportunities.

AI Navigator+ Agent: The Companion Think Tank for Enterprise International Cooperation

Corpus Source Composition





Corpus Topic Distribution



Country-specific corpora covering policies and regulations, business intelligence and local customs have been transformed into AI-powered expert services. The WorkBuddy section now provides 22 experts across seven countries, covering strategy, marketing, business development, finance, HR, legal compliance and public affairs. The platform has recorded over 30,000 uses globally, serving thousands of SMEs.

Open Technical Infrastructure

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➢ Focusing on “building full-chain technical capabilities and gathering ecological resources across all links” for AI, we keep developing key national-level public-service supporting platforms for artificial intelligence.

Core Achievements

Platform Visits: 500+ daily visits, over 250,000 cumulative visits

Registered Users: 120+ certified enterprises, 6000+ developers

Resource Aggregation: 3000+ models, 950+ datasets

Trial & Selection: 200+ APIs, 72 billion token calls

More than **120 entities** have settled on the platform, covering leading enterprises, universities, three major telecom operators, hardware vendors, cloud providers and other upstream and downstream players.



BAAI 北京智源人工智能研究院 BEIJING ACADEMY OF ARTIFICIAL INTELLIGENCE

蚂蚁集团 ANT GROUP

360 商汤 sensetime JDT 京东科技 中国移动 China Mobile

China unicom 中国联通 中国电信 CHINA TELECOM 智谱·AI 科大讯飞 iFLYTEK

vivo Worki 云工场科技 飞桨 AI Studio ...

https://aihub.caict.ac.cn/

National-level AI Open-Source Community

Service Capabilities & Typical Cases

✓ Deploy local sub-platforms to unlock regional collaborative efficiency

Public Service Platform for AI Large Models (Wuhan)



Public Service Platform for AI Large Models (Shenzhen)



Chongqing AI Public Service Platform



AI Spacetime-Nanjing AI International Community OPC Public-Service Platform



Suzhou OPC One-Stop Service Platform (Under construction)



Xiamen AI Public Service Platform



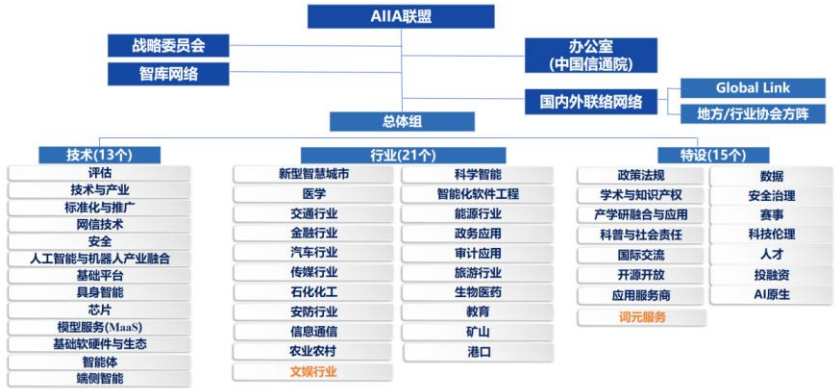
Industrial Ecosystem and Market Connection

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Expand China Artificial Intelligence Industry Alliance (AIIA)

- initiated by multiple entities under the guidance of several ministries and commissions.
- More than **1,800** member entities and **49** working groups

中国人工智能产业发展联盟
Artificial Intelligence Industry Alliance



Organize National Conferences and Competitions

Organize National Conferences and Competitions

- 2nd session in 2025, attended by Director Han Xia of MIIT Science and Technology Committee, with over 5,000 participants.





"Xingzhi Cup" National AI Innovation and Application Competition

- In 2025, the 2nd competition drew more than 6,000 teams and over 18,000 registered participants.



China AI Competition

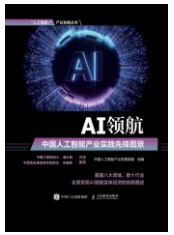
- Held six consecutive editions in Xiamen from 2020 to 2025



Collect Pioneering Cases









Organize National-level Exhibitions

- 2024–2026, successively undertakes the WAIC AI Industry Innovation Achievements Exhibition

2024



2025



2026



Carry out the "In-depth Tour" Campaign

2024-2026：16 supply-demand matching events across 12 locations


Suzhou(2)


Wuxi


Qingdao(2)


Beijing


Guangzhou (2)


Xiamen


Dalian


Kunshan


Nanjing（2）



Nanchang



Shanghai


Wuhan

Trustworthy Governance and Compliance

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- Operating the AIIA Security Governance Committee and jointly releasing the "AI Security Commitments" with the industry to organize domestic and international conferences and events, fostering a healthy and self-regulatory AI industry.

Core Achievements

- Established the organizational structure and operational norms of the AIIA Security Governance Committee, forming a series of technical specification systems.



First Meeting 2025



Annual Meeting 2026



First Meeting 2026

- Jointly released the "AI Security Commitments" with the industry, to cultivate a self-regulatory industry ecosystem.

Promoted Chinese Industrial Practices

France · Paris

During the Paris AI Action Summit, presented the "Commitments" at a side event on behalf of CNAisDA.



Released Practice Disclosure Outcomes

China · Beijing

At the AIIA Plenary Session in Beijing, witnessed the release of the "Commitments" practice disclosure outcomes by 18 leading enterprises.



Launched Bilingual Disclosure Website

Jingzhi Community

Launched the English-Chinese online disclosure column for the "Commitments," totaling 20 practice standards and 43 case studies.



Promoted the Security Commitments Framework

China · Shanghai

At the WAIC main forum, released the "China AI Security Commitments Framework," attracting significant international attention.



Service Capabilities & Outcomes

Co-hosted International Conferences on AI Security Governance



Supported the establishment of **the WIC AI Special Committee**



Hosted **multiple Global AI Governance Roundtable Forums**

Jointly Developed AI Security Governance Frameworks

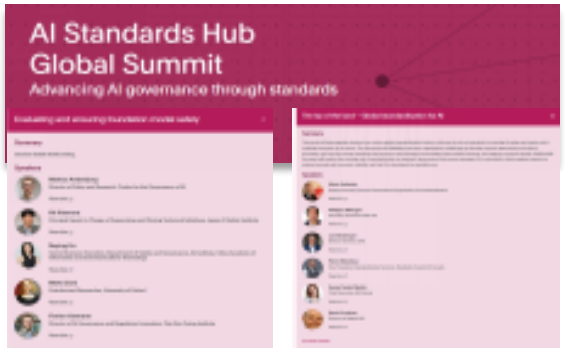


Engaged with Singapore's **IMDA on AI initiatives**



Visit by the **UK Artificial Intelligence Safety Institute** to CAICT

Active Participation in Global AI Security Standardization Efforts



Participated in and spoke at **the Global Summit on AI Standards**

The UN specialized agency for ICTs

Involvement in the standardization of digital watermarking within **ITU-T Study Group 21**



Engaged in exchanges with the **British Standards Institution (BSI)**

Outlook: Advancing Inclusive AI through ITU-D Cooperation

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➢ **Through ITU-D, strengthened international cooperation can help turn advances in AI into practical digital-development outcomes by promoting wider adoption, stronger skills, trusted networks and sustainable applications.**

1 Accelerate AI-Enabled Digital Transformation



- Share **use cases and best practices** on AI-enabled services in areas such as health, education, agriculture and smart communities.
- Promote effective **platform, policy and implementation approaches** that help countries translate emerging technologies into practical services.

2 Strengthen Digital Skills and Inclusive AI Adoption



- Expand **AI and digital-skills training** at basic, intermediate and advanced levels for people from different social and economic backgrounds.
- Share approaches to overcome adoption barriers through **accessible training, multilingual information and inclusive services**, especially for underserved communities.

3 Strengthen Cybersecurity and Trust in AI-Enabled Networks



- Share **cybersecurity policies, regulatory approaches and good practices** for emerging ICT technologies, including AI applications.
- Strengthen **cyber resilience, information exchange and multistakeholder cooperation** to build confidence in AI-enabled digital services.

4 Advance Green and Sustainable AI/ICT Applications



- Explore how **AI and emerging ICT tools** can support climate action, environmental monitoring, disaster mitigation and more efficient e-waste management.
- Share evidence, case studies and best practices to reduce the environmental footprint of ICTs and promote sustainable digital development.



Through ITU-D's shared practices, capacity building and international cooperation, AI can become a practical enabler of inclusive, secure and sustainable digital development.

Thank You