

# 人工智能赋能全球可持续发展的典型示范

## Model Cases of Artificial Intelligence Empowering Global Sustainable Development

Yi Zhang  
China Academy of Information and  
Communications Technology

# 目录 Directory

## 一. 人工智能发展带来机遇和挑战

Opportunities and Challenges Brought by the Development of Artificial Intelligence

## 二. 联合国人工智能向善峰会和案例征集情况

United Nations Summit on Artificial Intelligence for Good and Case Study Solicitation

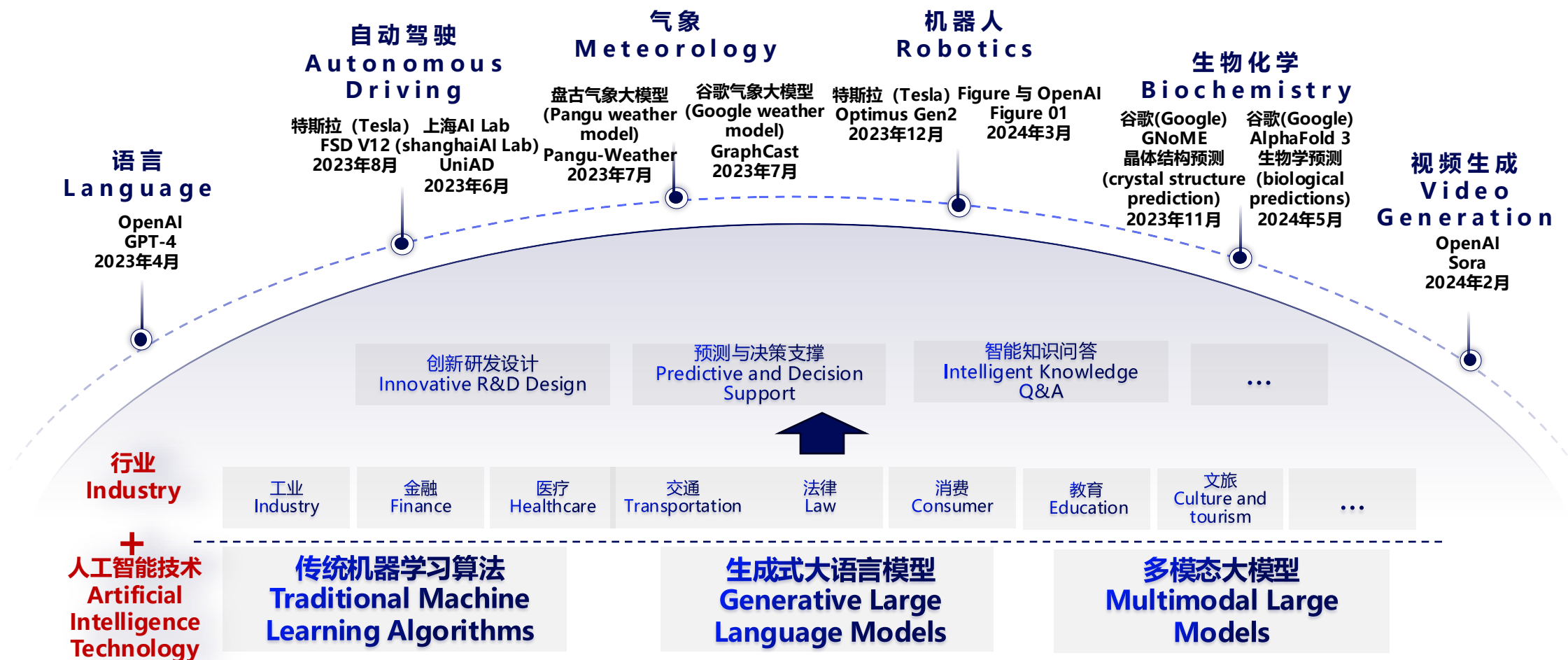
## 三. 中国信通院的相关工作

Relevant Work of CAICT



### 人工智能技术高速发展，推动产业更加智能、绿色、安全

The Rapid Development of Artificial Intelligence Technology is Driving Industries to Become Smarter, Greener, and Safer



# 人工智能发展中可能带来不同层面的“智能鸿沟”

## The Development of Artificial Intelligence May Lead to "Intelligence Gaps" at Various Levels

“智能鸿沟”是由人工智能、算法等智能技术所带来的新型数字鸿沟。

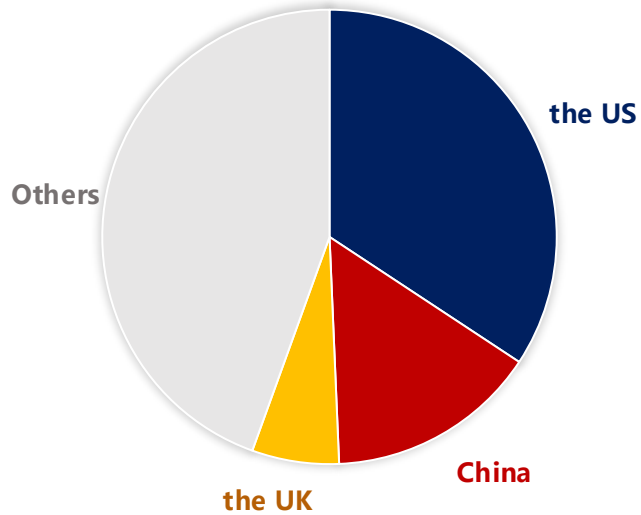
The "Intelligence Gap" is a new form of digital divide brought about by artificial intelligence, algorithms, and other intelligent technologies.

全球人工智能产业分布不均  
Global Distribution of the Artificial Intelligence Industry is Uneven

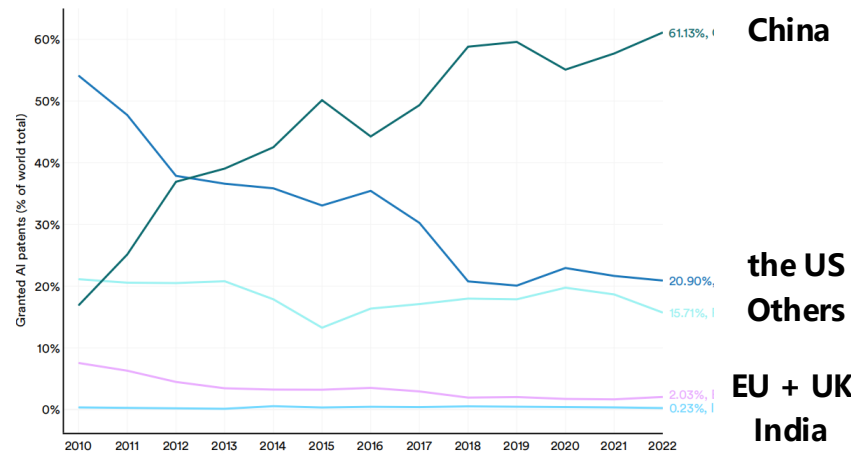
全球AI知识产权更趋集中  
Global AI Intellectual Property is Becoming More Concentrated

全球大模型集中在AI“第一梯队”国家  
Global Large Models are Concentrated in the "First-Tier" AI Countries'

全球AI企业数量分布  
Global Distribution of AI Companies

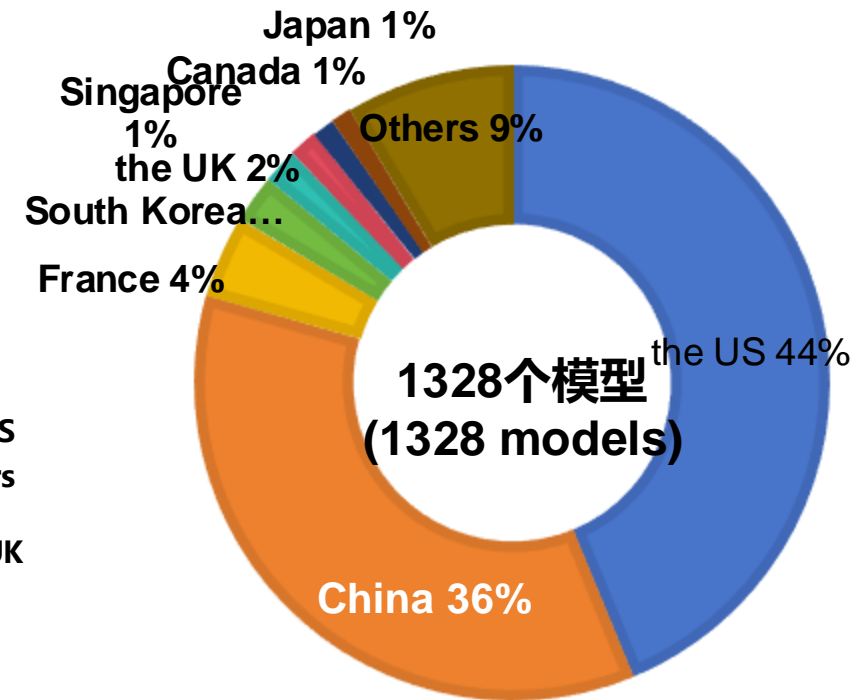


2010-2022年AI授权专利占比  
Proportion of AI Granted Patents from 2010 to 2022



数据来源：斯坦福AI INDEX 2024报告

Data Source: Stanford AI INDEX 2024 Report



数据来源：中国信通院，2024年6月

Data Source: CAICT, June 2024

# 目录

## Directory

### 一. 人工智能发展带来机遇和挑战

Opportunities and Challenges Brought by the Development of Artificial Intelligence

### 二. 联合国人工智能向善峰会和案例征集情况

United Nations Summit on Artificial Intelligence for Good and Case Study Solicitation

### 三. 中国信通院的相关工作

Relevant Work of CAICT

将人工智能创新者与问题所有者联系起来，以解决全球社会和经济挑战。

Connecting AI Innovators with Problem Owners to Address Global Social and Economic Development Challenges.



### AI for Good Global Summit

An ITU experience

2017年初创阶段  
2017 Start-up Phase

AI for Good峰会首次举办，  
The AI for Good Global Summit was held for the first time.

2020-2022年线上转型阶段  
2020-2022  
Online Transformation Phase

AI for Good峰会连续三年以线上形式举办。  
The AI for Good Global Summit has been held online for three consecutive years.

2023年至今线下回归阶段  
2023 to present  
Offline Comeback Phase

2023年首次回归线下。展示了最新的AI技术成果。  
In 2023, it returned to an offline format for the first time, showcasing the latest achievements in AI technology.

峰会  
Summit

学习  
Learning

倡议  
Initiatives

交流  
Exchange

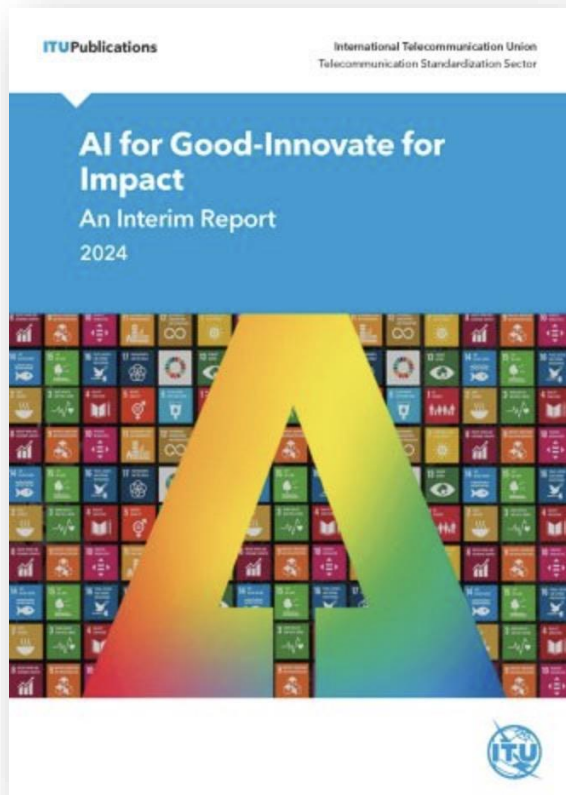
数字平台  
Digital Platform

治理  
Governance

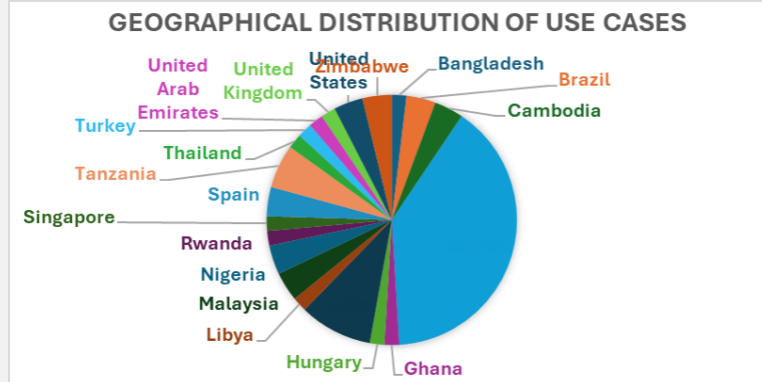
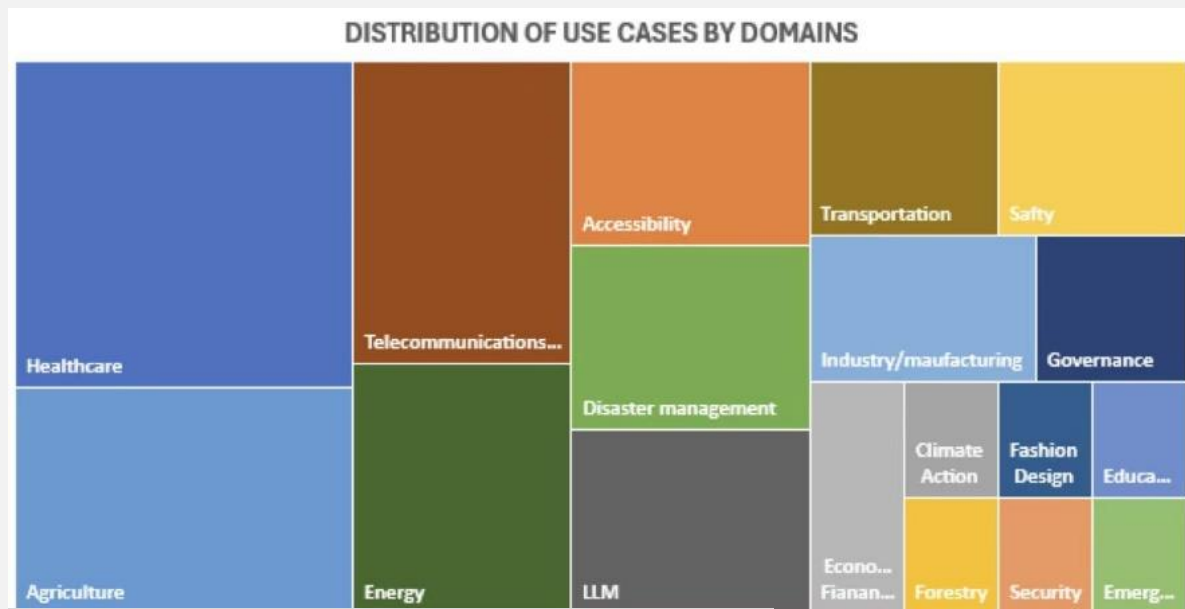
确定切实可行的  
人工智能解决方案  
Identifying Feasible AI Solutions



中国信通院支持国际电信联盟发布人工智能向善AI for Good案例集，通过标杆案例弥合智能鸿沟  
The CAICT supports the International Telecommunication Union (ITU) in publishing AI for Good case studies, bridging the intelligence gap through benchmark cases.



联合国提出17个可持续发展目标，应对减贫、消除不平等和气候变化等全球性挑战  
The United Nations has proposed 17 Sustainable Development Goals (SDGs) to address global challenges such as poverty reduction, inequality elimination, and climate change.



全球200余份案例，最终选出了来自19个国家和53个优秀案例，覆盖17个联合国可持续发展目标。  
Out of more than 200 global case submissions, 53 outstanding cases from 19 countries were selected, covering the 17 United Nations Sustainable Development Goals (SDGs).



AI for Good案例覆盖多领域创新类别  
AI for Good Cases Span Multiple Innovative Categories



医疗保健 Healthcare



金融 Finance



制造业 Manufacturing



汽车 Automotive Industry

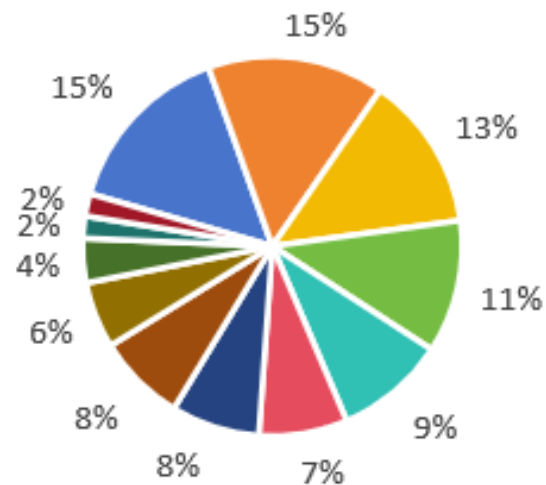


未来网络 Next Generation Network



其他行业 Other Industries

行业赛道多样性



- 医疗健康 Healthcare
- 弱势群体关爱 Care for Vulnerable Groups
- 交通技术 Transportation Technology
- 商业 Business
- 可持续发展 Sustainable Development
- 文化代表性 Cultural Representation
- 通讯科技 Telecommunications Technology
- 农业生产 Agricultural Production
- 自然环境 Natural Environment
- 能源 Energy
- 政府事务 Government Affairs
- 教育 Education

## 从企业ESG质量与公司运营到普惠民众, 促进智能化转型, 创造新机遇

From Corporate ESG Quality and Operations to Inclusive Benefits for the Public, Promoting Intelligent Transformation and Creating New Opportunities

### AI辅助ESG治理



#### 联想ESG数字化平台 Lenovo ESG Digital Platform

利用AI技术解决数据收集原始、数据缺失、数据连通性低等问题。减少80%人工操作量, 识别问题数据, 降低数据风险。

Leveraging AI technology to address issues such as raw data collection, data gaps, and low data connectivity. This reduces manual operations by 80%, identifies problematic data, and mitigates data risks.



### AI赋能投资



#### 东方财富智能投资助手 East Money Smart Investment Advisor

依托东方财富自研AI技术, 为广大投资者提供全方位的投资顾问服务和财经要闻分析。累计服务千万级用户, 回答数亿金融问题。

Relying on East Money's self-developed AI technology, it provides comprehensive investment advisory services and financial news analysis to a wide range of investors. It has served millions of users and answered billions of financial questions.



### AI优化企业运营



#### 蚂蚁集团科技企业项目 Ant Group Technology Business Project

该案例旨在帮助中小企业以较低成本实施推荐系统, 推动其营收增长。

This case aims to help small and medium-sized enterprises (SMEs) implement recommendation systems at a lower cost, driving their revenue growth.



### 从提升药物研发到早期诊断的精准化, 实现国际医疗服务与普惠医疗的可持续发展

From Advancing Drug R&D to Precision in Early Diagnosis, Achieving Sustainable Development in International Medical Services and Inclusive Healthcare

#### 推动创新研究

##### 盘古药物分子大模型辅助超级抗菌药研发

Pangu Drug Molecule Large Model for Super Antibiotic Development



显著提升**新药研发效率**, 将药物研发成本降低70%。

Significantly enhance **New Drug Development Efficiency**, reducing R&D costs by 70%.

3 良好  
健康与福祉



#### 加强早期筛查

##### 基于深度学习的平扫CT早期多癌筛查

Early Multi-Cancer Screening with Deep Learning CT Scan



通过AI帮助边远地区癌症和慢病精准早诊。

Using AI to facilitate precise early diagnosis of cancer and chronic diseases in remote areas.

3 良好  
健康与福祉



#### 构建国际医疗

##### 人工智能国际医院 International AI Hospital

通过智能化医疗服务和数字化管理, 助力贫困地区医疗水平提升。



Through Intelligent Healthcare Services and Digital Management, supporting the improvement of medical standards in impoverished regions.

3 良好  
健康与福祉



#### 助力普惠医疗

##### 医学AI共享平台惠及AI产品研发及千万患者诊疗

Medical AI Sharing Platform Benefits AI Product Development



自主研发了多模态医疗大模型, **降低社会医疗成本**。

Developed an In-House Multimodal Medical Model to **lower healthcare costs**.

3 良好  
健康与福祉



### 通过无人化、智能化、自动化与现代化管理, 优化资源配置, 显著提升基础设施的服务效率与覆盖范围

Through Unmanned, Intelligent, Automated, and Modernized Management, Optimizing Resource Allocation and Significantly Enhancing the Service Efficiency and Coverage of Infrastructure.

#### 实现货运无人化

无人物流作为机场/厂区货运基础设施  
Unmanned Logistics for Airport/Industrial Park Cargo Infrastructure  
提供完全“无人化”的全天候物流运输作业服务。  
Providing Fully Unmanned, 24/7 Logistics Transportation Services.



8 体面工作和经济增长



#### 提升能源效率

人工智能助力风电功率预测  
AI-Assisted Wind Power Prediction  
本项目实现了准确的风能功率预测, 用于电力调度。  
This project delivers accurate wind power prediction for electricity scheduling.



9 产业、创新和基础设施



#### 提升能源效率

基于人工智能的可信新能源功率预测  
AI-Based Reliable New Energy Power Prediction  
提供准确且可解释的可再生能源预测服务。  
Providing Accurate and Interpretable Renewable Energy Prediction Services.



7 经济适用的清洁能源



#### 提升交通安全

印度交通安全iRASTE  
India's Road Safety iRASTE  
在公共汽车上安装驾驶辅助系统和碰撞避免设备。  
Installing Advanced Driver Assistance Systems and Collision Avoidance Systems on public buses.



11 可持续城市和社区



## 实现自动化、无人化与智能化管理，优化资源配置，驱动智能革新与效率提升

Achieving Automated, Unmanned, and Intelligent Management to Optimize Resource Allocation, Drive Smart Innovation, and Enhance Efficiency..

### 全面自动化



**面向汽车零部件的工业高精度视觉检测应用**  
High-Precision Visual Inspection for Automotive Parts.  
通过**智能的视觉检测系统**，提升了检测准确度、速度。  
An **Intelligent Visual Inspection System** has improved detection accuracy and speed.

9 产业、创新和基础设施



### 安全保障一体化服务



**智能汽车安全保障一体化服务平台**  
Integrated Smart Vehicle Safety Assurance Platform  
旨在提升**自动驾驶安全等级**，提高交通自动化程度。  
This project aims to **advance global autonomous driving, enhance safety levels and increase traffic automation.**

9 产业、创新和基础设施



### 场景智能化解决



**构建知识图谱升级一体化技术服务平台**  
Building a Knowledge Graph to Upgrade an Integrated Technical Service Platform.  
推出**制造业维修场景智能化解决方案**。  
Introducing **Intelligent Solutions for manufacturing repair scenarios.**

8 体面工作和经济增长



### 制造业智能化升级



**变电站智能分析主机**  
Intelligent Analysis Host for Substations.  
本项目实现**实时监测与预警、故障诊断与能源效率优化**。  
This project implements **real-time monitoring, early warning, fault diagnosis, and energy efficiency optimization.**

7 经济适用的清洁能源



### 坚持创新驱动, 关注农业可持续性与环境保护, 实现农业发展与生态平衡的共同进步

Adhering to Innovation-Driven Development, Focusing on Agricultural Sustainability and Environmental Protection, Achieving Joint Progress in Agricultural Development and Ecological Balance.

#### 提效促经济



提效促经济, 为农民带来经济收益

Improve Efficiency, Boost Economy.

该项目为农民提供了关于种植技术、水资源管理、土壤健康和物流等方面的精确信息。

Provides precise information on planting techniques, water management.

13 气候行动



#### 推动农业发展



推动可持续发展的农业发展

Promote Sustainable Agriculture Development.

解决方案集成了作物疾病检测和物联网技术, 推动农业可持续发展。

The solution integrates crop disease detection, and IoT technology for sustainable agriculture.

13 气候行动



#### 优化水资源使用



推动农业社区的经济增长

Optimizing Water Resource Use

通过智能灌溉系统, 可以减少水资源的浪费, 提高作物产量, 支持农业社区的经济增长。

Smart irrigation systems can reduce water waste and support economic development in agricultural communities.

13 气候行动



#### 推动城市可持续发展



实现低排放目标, 推动城市可持续发展

Drive Sustainable Urban Development

通过智能技术实现能源优化管理, 减少碳排放。

Using Smart Technologies to optimize energy management, reduce carbon emissions.

13 气候行动



### 助力公共服务，推广未来网络技术，深化网络服务的普及与优化，有效弥合不同群体间的智能鸿沟，促进社会的公平与进步

Supporting Public Services, Promoting Future Network Technologies, Deepening the Popularization and Optimization of Network Services, Effectively Bridging the Intelligence Gap Between Different Groups, and Promoting Social Equity and Progress.

#### 促进6G标准创新



#### AI减少非洲贡献者在6G标准方面的障碍

#### AI Reduces Barriers for African Contributors in 6G Standards Development

研发聊天机器人将国际电信联盟的材料生成本地语言的字幕，支撑6G标准的创新。

This project developed a chatbot that categorizes ITU materials, including multimedia content, into easily understandable sections and generates local language subtitles, supporting 6G standard innovations.

9 产业、创新和基础设施



#### 加强6G安全性



#### AI助力6G网络编排与安全

#### AI Empowering 6G Network Management and Security

通过简化网络配置、预测资源使用、提高可观测性和实时异常监控，提升6G及未来网络的效率和安全性。

This project improves the efficiency and security of 6G and future networks by simplifying network configuration, predicting resource usage, enhancing observability, and providing real-time anomaly monitoring.

11 可持续城市和社区



助力公共服务，推广未来网络技术，深化网络服务的普及与优化，有效弥合不同群体间的智能鸿沟，促进社会的公平与进步  
Promoting Efficient Resource Allocation and Environmental Sustainability in the Field of Social Security, Leading Society Towards a Safer, Fairer, and Greener Future Together.

#### 促进透明化监管



AI增强公共采购与项目监测透明度系统

AI-Enhanced Transparency System for Public Procurement and Project Monitoring.

基于人工智能的公共采购与项目监测系统，能够自动识别异常交易、预防腐败行为。

AI-Based Public Procurement System identifies abnormal transactions.

11 可持续  
城市和社区



#### 守护工人安全



生成式AI守护高危行业工人安全

Generative AI Ensuring Worker Safety in High-Risk Industries.

系统能够自动学习工作场景中的安全规范，实时监测工人行为。

The system learns safety protocols, monitoring worker behavior in real time.

11 可持续  
城市和社区



#### 保障基础设施安全



AI驱动应急网络优化

AI-Driven Optimization of Emergency Networks.

利用AI技术优化5G/6G网络性能，确保关键信息的快速传输与响应。

Using AI to optimize 5G/6G network performance, ensuring fast transmission and response of critical information.

11 可持续  
城市和社区



#### 可靠可再生能源预测



可解释AI引领可再生能源预测与电网稳定

Explainable AI for Renewable Energy Prediction and Grid Stability.

不仅提高了预测的准确性，还确保了预测结果的可解释性，为电网运营商提供了可靠的决策依据。

It enhances prediction accuracy and ensures explainability, providing reliable decision support for grid operators.

11 可持续  
城市和社区





### 坚持以人为本，关注个体需求和特殊群体关切，实现多群体包容性共同发展

Adhering to a People-Centered Approach, Focusing on Individual Needs and Concerns of Special Groups, and Achieving Inclusive Development for Multiple Communities.

#### 助力听障人士



助力听障人士说出“人生第一句”  
Enabling hearing-impaired individuals to speak their 'first words.'  
帮助听障人士无障碍与外界交流。  
Helping hearing-impaired individuals communicate with the outside world.

10 减少不平等



#### 发展无障碍



vivo无障碍解决方案  
vivo Accessibility Solutions.  
提出了无障碍通话、声音识别、手语翻译官等无障碍功能与产品，助力残障人士。  
Providing accessible calling and sign language interpretation features and products.

10 减少不平等



#### 实现跨文化交流



助力语言社区包容性发展  
Supporting Inclusive Development in Language Communities  
首个针对东南亚语言优化的专用大模型。  
The first specialized large model optimized for Southeast Asian languages.

9 产业、创新和基础设施



#### 助力银发触网



助力银发人群跨越“数字鸿沟”  
Assisting Seniors in Bridging Digital Divide  
助老年客户办理移动业务，助力老年客户跨越“数字鸿沟”。  
Helping senior customers manage mobile services and bridge the digital divide.

10 减少不平等



赋能教育与安全领域，普及智能教育，深化教育公平与优质化发展，  
有效应对复杂多变的安全威胁，保障社会的安全与稳定

Empowering education and security, promoting intelligent and equitable education, addressing threats, ensuring stability

促进教育平等化



九天·毕昇平台助力人工智能人才培养  
The Jiutian·Bisheng Platform Facilitates AI  
Talent Development

本项目实现可持续的教育发展和社会进步  
This project promotes sustainable educational  
development and social progress.

4 优质教育



加强隐私安全



多模态生物防伪大模型  
Multimodal Biometric Anti-Counterfeiting  
Model

针对金融业务系统，拦截各类高风险攻击方式  
Intercepts high-risk attacks and provides  
robust support for financial business systems.

9 产业、创新和  
基础设施



优化智能教育



码上：大模型赋能的智能编程教学平台  
Smart Programming Education Platform  
Enhanced by Large Models

采用北邮自研核心技术支撑学校有组织编程教学  
Utilizing core technologies independently  
developed by BUPT to support organized  
programming education in schools

10 减少不平等



保障生命安全



见微安全大模型  
Insightful Security Large Model  
本项目致力于提升安全运营工作的效率  
This project enhances the efficiency of  
security operations.

9 产业、创新和  
基础设施



# 目录

## Directory

### 一. 人工智能发展带来机遇和挑战

Opportunities and Challenges Brought by the Development of Artificial Intelligence

### 二. 联合国人工智能向善峰会和案例征集情况

United Nations Summit on Artificial Intelligence for Good and Case Study Solicitation

### 三. 中国信通院的相关工作

Relevant Work of CAICT

- 金砖国家作为新兴市场和发展中国家的代表，认识到人工智能为全球可持续发展的重要作用，**认为金砖国家需相互合作，造福全社会和人类。**
- As representatives of emerging markets and developing countries, the BRICS countries recognize the important role of artificial intelligence in promoting global sustainable development, and believe that **the BRICS countries need to cooperate with each other to benefit the whole society and humanity.**

### 01 2022年

金砖国家领导人会晤鼓励分享最佳实践，开展比较研究，推动指定共同治理方式，推进人工智能发展，为**全球可持续发展发挥重要作用。**

#### 2022

The 14th BRICS Summit Beijing Declaration encouraged sharing best practices, conducting comparative studies, and developing a common governance approach to facilitate AI development, **contributing to global sustainable development.**



### 02 2024年3月

经中央领导同志批准**同意依托中国信息通信研究院建设中国—金砖国家人工智能发展与合作中心。**

With the approval of central leadership, it was agreed to establish the China-BRICS Artificial Intelligence Development and Cooperation Center, **relying on the China Academy of Information and Communications Technology (CAICT).**

#### March 2024

### 03 2024年6月

王毅外长宣布，**中国—金砖国家人工智能发展与合作中心”成立。**

#### June 2024

Foreign Minister Wang Yi announced **the establishment of the "China-BRICS Artificial Intelligence Development and Cooperation Center".**



中心秉持**开放包容、合作共赢**的金砖精神，本着**共商、共建、共享**原则，加强信息交流和技术合作，**深化产业对接和项目合作**，推动应用赋能和能力提升，形成具有广泛共识的**人工智能治理框架和标准规范**，共同把握**人工智能发展机遇**，妥善应对风险挑战，助力各国实现**2030年可持续发展议程**。

- The Center upholds the BRICS spirit of **openness, inclusiveness, and win-win cooperation**, and adheres to the principles of joint consultation, joint construction, and shared benefits.
- It strengthens information exchange and technological cooperation, **deepens industrial docking and project cooperation**, promotes application empowerment and capability improvement, and **forms a widely-agreed AI governance framework and standard specifications**.
- It jointly seizes the **opportunities of AI development**, properly responds to risks and challenges, and helps countries achieve the **2030 Agenda for Sustainable Development**.

## Overview of Key Cooperation Areas of the Center

- 中心是面向金砖国家开展人工智能合作的国际合作平台，鼓励金砖国家政府、企业、研究机构、行业协会、多边开发机构等广泛参与。中心同时向其他新兴市场和发展中国家开放。
- The Center is an international cooperation platform for AI cooperation among BRICS countries, encouraging the extensive participation of governments, enterprises, research institutions, industry associations, multilateral development agencies, and other entities from BRICS countries. The Center is also opened to other emerging markets and developing countries.
- 中心致力于推动中国与金砖国家之间的人工智能发展与合作。
- The Center is dedicated to promoting AI development and cooperation between China and BRICS countries.

### 重点1：加强信息交流和技术合作

Strengthening information exchange and technological cooperation

### 重点3：推动应用赋能和能力提升

Promote application empowerment and capacity building

### 重点2：深化产业对接和项目合作

Deepen the synergy of industries and project cooperation

### 重点4：推动治理合作和标准规范

Develop governance frameworks and standards with broad-based consensus

近期重要活动

Recent Important Activities

• 举办金砖人工智能合作案例征集活动

To Hold The BRICS AI Cooperation Case Collection Activity.

02

• 举办人工智能大模型挑战赛

To Hold The AI Large Model Competition.

04



案例征集



举办展览



赛事启动



平台建设

01

• 举办新工业革命伙伴关系数智赋能展

To Hold the Digital Intelligence Empowerment Exhibition for the Partnership on New Industrial Revolution.

03

• 启用中国—金砖国家人工智能公共服务平台

Launch of the China-BRICS Artificial Intelligence Public Service Platform

未来规划

Future Planning

主办一系列国际人工智能研讨会

- Host a series of international AI seminars/workshops.

协助人工智能领域的供需匹配

- Assist matching supply and demand in the field of AI.

协助人工智能领域的供需匹配

- Assist matching supply and demand in the field of AI.

开展联合研究等

- Conduct joint research etc..

**感谢观看**  
**THANKS**





# 目录

## Directory

- 一. 人工智能发展机遇和挑战
- 二. 人工智能AI for Good案例征集情况
- 三. 中国信通院的相关工作

# 目录

## Directory

- 一. 人工智能发展机遇和挑战
- 二. 人工智能AI for Good案例征集情况
- 三. 中国信通院的相关工作