

Parallel Session on Artificial Intelligence Empowering New Industrialization

【Basic Information】

Moderator:

Address:

Chen Ying Vice President, Chinese Institute of Electronics

Keynote Speech:

Liang Liang Deputy Secretary-General, Chinese Institute of Electronics

Panel Discussion:

Gong Ke Past President, World Federation of Engineering Organizations

Address:

Xiong Jijun Vice Minister of Industry and Information Technology of China

Irakli Nadareishvili Vice Minister of Economy and Sustainable Development of Georgia

Xu Xiaolan
Member of the Standing Committee of the National Committee of CPPCC
Vice Chairwoman of the Central Committee of the China Zhi Gong Party
Vice President of the All-China Women's Federation
President of the Chinese Institute of Electronics

Craig Allen President, US-China Business Council (USCBC)

Keynote Speech:

Joseph Sifakis 2007 Turing Award Winner

Zhang Jianwei Foreign Member of the Chinese Academy of Engineering; Professor at the University of Hamburg

Michael Locher-Tjoa Vice President, SAP

Wang Xingxing Founder and Chief Executive Officer, Unitree

Frank Meng Chairman, Qualcomm China

Wu Hua Chair, Baidu Technical Committee

Panel Discussion:

Xu Duo Vice President of the Smartphone Department, General Manager of the Intelligent Manufacturing Department, Xiaomi

Jiang Lei Chief Scientist, National and Local Co-Built Humanoid Robotics Innovation Center

Martin Xu Corporate Senior Vice President, Honor Device Co., Ltd.

Liu Cong Vice President of iFLYTEK, Dean of iFLYTEK Research Institute, and Standing Director of the Chinese Institute of Electronics

Yang Fan Co-founder and President of SenseCore Business Group, SenseTime

【Brief Introduction】

On November 5, 2024, the Parallel Session on Artificial Intelligence Empowering New Industrialization of the 7th Hongqiao International Economic Forum (HQF), hosted by the Ministry of Industry and Information Technology and the Ministry of Commerce of China, organized by the Chinese Institute of Electronics, was held at National Exhibition and Convention Center (Shanghai).

The world is undergoing profound changes unseen in a century, as a new wave of technological revolution and industrial transformation unfolds. The rise of intelligence is driving unprecedented, groundbreaking innovations. In the course of new industrialization, artificial intelligence (AI), as a core driving force, is reshaping the manufacturing industry and injecting it with unprecedented innovative power. Against this backdrop, the session aims to bring together prestigious scholars and business leaders from around the globe to address the vital role of AI technology and its application in new industrialization, contributing ideas to foster global economic growth and advance the building of a community with a shared future for mankind.

【Address】

Xiong Jijun, Vice Minister of Industry and Information Technology of China,
addressed the Parallel Session on Artificial Intelligence Empowering New Industrialization

Xiong Jijun, Vice Minister of Industry and Information Technology of China, emphasized that the Ministry of Industry and Information Technology will work with all parties to accelerate the integration of artificial intelligence into new industrialization. The key initiatives include: First, strengthening innovation cooperation by supporting domestic and international enterprises, universities, and research institutions in forming innovation consortia to jointly advance the R&D of key technologies for large models; second, strengthening industrial cooperation through international platforms such as the China-BRICS Artificial Intelligence Development and Cooperation Center to build a secure and stable global AI industrial chain; third, strengthening standards cooperation by working with international standardization organizations to propose more high-quality international standards; and fourth, intensifying governance cooperation by fully implementing the “Global AI Governance Initiative” to create an open, fair, and non-discriminatory environment for AI development.



Irakli Nadareishvili, Vice Minister of Economy and Sustainable Development of Georgia, addressed the Parallel Session on Artificial Intelligence Empowering New Industrialization

Irakli Nadareishvili, Vice Minister of Economy and Sustainable Development of Georgia, stated that Georgia is actively using artificial intelligence to improve industrial efficiency, productivity, and adaptability in order to drive economic growth. The government has prioritized AI by collaborating with the World Bank and top scientists to formulate a national vision for AI development that focuses on three key areas: education, agricultural technology, and healthcare. Through educational reforms, Georgia aims to improve AI literacy, apply advanced technologies to improve food safety and sustainability and provide personalized healthcare services. With strong performance in the business environment, innovation index, and security rankings, the government plans to introduce tax incentives to further promote the development of artificial intelligence.



Xu Xiaolan, Member of the Standing Committee of the National Committee of CPPCC, Vice Chairwoman of the Central Committee of the China Zhi Gong Party, Vice President of the All-China Women's Federation, President of the Chinese Institute of Electronics, addressed the Parallel Session on Artificial Intelligence Empowering New Industrialization

Xu Xiaolan, Member of the Standing Committee of the National Committee of CPPCC, Vice Chairwoman of the Central Committee of the China Zhi Gong Party, Vice President of the All-China Women's Federation, President of the Chinese Institute of Electronics, emphasized that the Chinese Institute of Electronics has always adhered to the "Four Orientations," "Four Services" and "Five Capabilities." It leverages its resource advantages in innovation leadership and has established an innovation mechanism where "the market sets the questions and technology provides the answers." In terms of industrial empowerment, the Chinese Institute of Electronics is committed to promoting the application of general large models and specialized vertical models, driving new industrialization and high-quality development across industries throughout their entire life cycle. Additionally, it implements targeted measures to cultivate innovative talents and ensure their growth and success. On the international front, it plays a pivotal role in international organizations, strengthening exchanges and cooperation with global scientific and industrial communities to ensure that AI technologies improve livelihoods and benefit humanity.



Craig Allen, President, US-China Business Council (USCBC),
addressed the Parallel Session on Artificial Intelligence Empowering New Industrialization

Craig Allen, President of the US-China Business Council (USCBC), stated that the USCBC has always played a key role in US-China cooperation and remains confident about the prospects for collaboration between the two countries. Both the US and China are major players in artificial intelligence, and in the future, enterprises from both countries are expected to have more frequent and deeper interactions. However, both sides face challenges, making cooperation between the two countries particularly crucial. Despite the complexities in bilateral relations, we should remain optimistic about future cooperation, believing that through deeper interactions and exchanges, better solutions can be found to jointly address the risks and challenges in cooperation.



Chen Ying, Vice President, Chinese Institute of Electronics,
attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and moderated Address

【Keynote Speech】



Joseph Sifakis, 2007 Turing Award Winner,
attended via video the Parallel Session on Artificial Intelligence Empowering New Industrialization
and delivered a keynote speech

Joseph Sifakis, 2007 Turing Award Winner, said that the ultimate goal of artificial intelligence is to create machines with human-level intelligence that can understand the world and act on goals. Despite significant breakthroughs in AI, such as the emergence of products like ChatGPT, reliability challenges remain. Currently, AI is still in its early stages, with only the building blocks for creating intelligent systems available, and no established principles or technologies for developing complex intelligent systems. China is well-positioned to take the lead in industrial AI, and it should propose a vision different from that of the United States, leveraging its industrial base and data advantages to develop foundational components and specific technologies.



Zhang Jianwei, Foreign Member of the Chinese Academy of Engineering and Professor at the University of Hamburg, attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and delivered a keynote speech

Zhang Jianwei, Foreign Member of the Chinese Academy of Engineering and Professor at the University of Hamburg, said that in the future, disruptive technologies such as artificial intelligence, IoT, robotics, AR/VR, new energy, and new communication technologies will lay a solid foundation for innovation. With the support of big data and high computing power, artificial intelligence will experience explosive growth and be applied in fields such as green manufacturing, transportation, and healthcare. Robots will take on more tasks, and concerns about human-robot relationships, ethics, and the risks of misuse will become hot topics. The evolution from information intelligence to embodied intelligence will bring great prospects, with robots playing a key role in industries such as pharmaceuticals and agriculture. China has a strong foundation in this area and is expected to make breakthroughs.



Michael Locher-Tjoa, Vice President, SAP,
attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and delivered a keynote speech

Michael Locher-Tjoa, Vice President of SAP, stated that SAP has long been involved in artificial intelligence and is now focusing on AI at the enterprise level. It is predicted that generative AI will deliver significant growth benefits in the next two to three years, with immense potential to optimize processes, improve efficiency, and support decision-making. Through decades of data accumulation, SAP has developed its generative AI tools that enable data integration and application optimization to help industry clients drive innovation. SAP will continue to invest heavily in AI technologies, including embedded, generative, and enterprise-level solutions, while prioritizing the relevance, reliability, and responsibility of data.



Wang Xingxing, Founder and Chief Executive Officer, Unitree, attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and delivered a keynote speech

Wang Xingxing, Founder and Chief Executive Officer, Unitree, stated that the company has shifted from quadruped robots to humanoid robots and has made rapid breakthroughs thanks to its technological accumulation and commercialization experience. The company focuses on improving the flexibility and intelligence of robots through deep reinforcement learning, with a strong emphasis on data collection and model development. Currently, AI training relies on large amounts of externally acquired data. However, true intelligence should have the ability to self-learn and self-program without the need for human data collection. He believes that with continuous investment in capital and talent, machine intelligence will undergo significant changes in the next three to five years, with the emergence of general large robotic models.



Frank Meng, Chairman, Qualcomm China,
attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and delivered a keynote speech

Frank Meng, Chairman of Qualcomm China, stated that key technologies such as 5G and AI are driving digital transformation and innovative applications across industries. Since the inaugural China International Import Expo (CIIE) in 2018, Qualcomm has participated and attended every year for seven consecutive years. This year, under the theme “Making Intelligent Computing Ubiquitous,” Qualcomm showcased its latest innovations and collaborative achievements in 5G and AI at the CIIE. Qualcomm looks forward to partnering with more collaborators, using technological innovation as a driving force for new industrialization, and collectively shaping an innovation-driven industrial era while building a new industrial ecosystem with all stakeholders.



Wu Hua, Chair, Baidu Technical Committee,
attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and delivered a keynote speech

Wu Hua, Chair of the Baidu Technical Committee, said that by leveraging large-scale neural networks and self-supervised algorithms, large models can learn from large amounts of data, improve their understanding, generation, and logical reasoning capabilities, thus demonstrating significant versatility. ERNIE bot, Baidu's industrial-grade, knowledge-enhanced large model, covers areas such as text and vision and creates a platform for industrial application tools. Through knowledge internalization, externalization, and intelligent agents technology, ERNIE bot integrates fast and slow thinking to improve accuracy and scalability. Large models are widely used in industries such as manufacturing, energy, and transportation. Their versatility, standardization, automation, and modularity provide robust support for new industrialization, showcasing immense potential and value.



Liang Liang, Deputy Secretary-General, Chinese Institute of Electronics,
attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and moderated Keynote Speech

【Panel Discussion】



Gong Ke, Past President, World Federation of Engineering Organizations, attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and moderated Panel Discussion



Xu Duo, Vice President of the Smartphone Department, General Manager of the Intelligent Manufacturing Department, Xiaomi, attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and participated in Panel Discussion

Xu Duo, Vice President of the Smartphone Department, and General Manager of the Intelligent Manufacturing Department, Xiaomi, emphasized that intelligent transformation should focus on the design of data integration and human-machine interaction to ensure effective transformation and management. Xiaomi's smart factories view data as a core element, which was fully considered in the establishment of the factory. Additionally, Xiaomi's smart factories have found that complete automation is unrealistic in advancing intelligent manufacturing, and attention should still be paid to the points of interaction between humans and machines. In the context of factory operations, the essence of new industrialization lies in achieving operational intelligence, which relies on two key pillars: intelligent equipment and human-machine collaboration.



Jiang Lei, Chief Scientist, National and Local Co-Built Humanoid Robotics Innovation Center, attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and participated in Panel Discussion

Jiang Lei, Chief Scientist of the National and Local Co-Built Humanoid Robotics Innovation Center, said that large models are transforming the manufacturing industry. As a multi-axis drive system, humanoid robots, with their high degrees of freedom, surpass existing control theories. As highly flexible foundational production systems, humanoid robots could play a significant role in production lines. They are not just tools, but productivity partners that can be adapted to different industries. In the future, to ensure harmonious and trusting coexistence between humans and machines, AI technology should be sufficiently open-source and transparent in its development, while legal and ethical norms should be incorporated into the training of machine intelligence.



Martin Xu, Corporate Senior Vice President, Honor Device Co., Ltd.,
attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and participated in Panel Discussion

Martin Xu, Corporate Senior Vice President, Honor Device Co., Ltd., stated that artificial intelligence is empowering the smart terminal industry in two key ways: First, through the evolution of AI in various devices such as smartphones, computers, and wearables, and second, by diversifying the interaction between terminals and users. Furthermore, AI technology is also being applied in production practices to create high-end manufacturing and green production. Honor is implementing a strategy focused on high-end, international, intelligent, and ecological development, with smart technologies closely linked to artificial intelligence applications. Honor is dedicated to integrating AI technology into smart terminals, providing personalized, all-scenario services, and creating a seamless connection experience across devices.



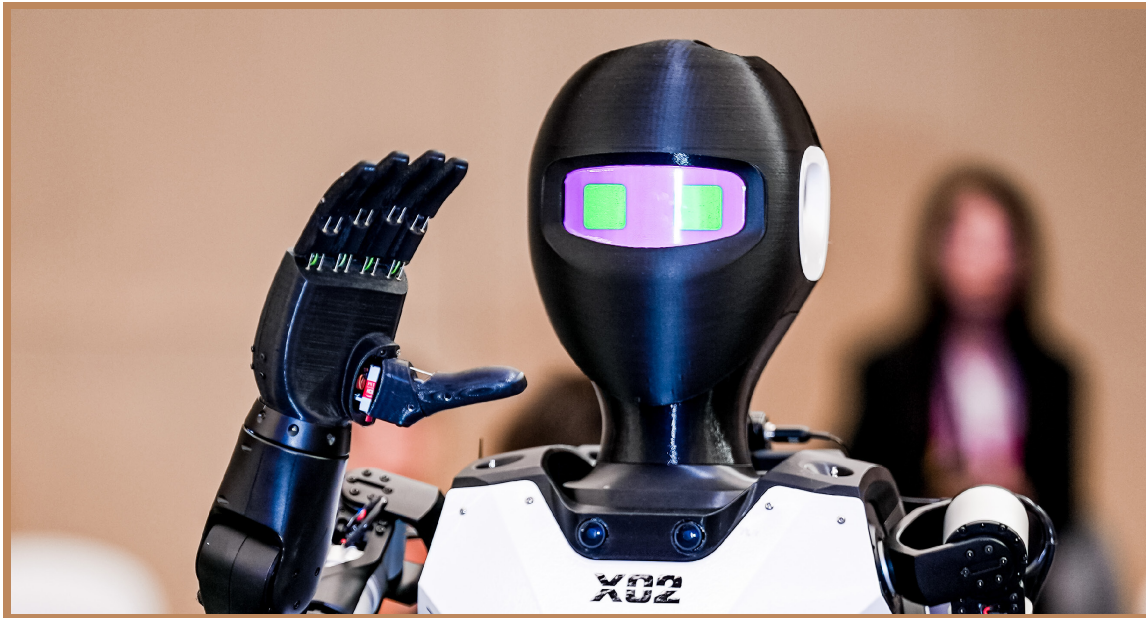
Liu Cong, Vice President of iFLYTEK, Dean of iFLYTEK Research Institute, and Standing Director of the Chinese Institute of Electronics, attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and participated in Panel Discussion

Liu Cong, Vice President of iFLYTEK, Dean of iFLYTEK Research Institute, and Standing Director of the Chinese Institute of Electronics, stated that the demands for reliability, stability, and accuracy in industrial scenarios are higher than in general ones. Many industrial scenarios have foundational technical models, which makes development more challenging. iFLYTEK has started by focusing on non-core production areas and gradually transitioned to core areas, laying the groundwork for intelligence through informatization and digitization. The industrial internet model developed by iFLYTEK, based on foundational large models, is helping many enterprises improve their capabilities across the entire supply chain, including research, production, supply, sales, service, and management, thereby jointly advancing the process of industrial intelligence.



Yang Fan, Co-founder and President of SenseCore Business Group, SenseTime, attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and participated in Panel Discussion

Yang Fan, Co-founder and President of the SenseCore Business Group at SenseTime, stated that over the past decade, SenseTime has helped customers with their intelligent transformation across multiple industries, experiencing both successes and failures. The key takeaway from these experiences is that timing is crucial to intelligent transformation. The level of informatization within a company and the data awareness of its employees serve as the foundation. Additionally, it is important to consider the pace of technological iteration and the cost-effectiveness ratio, ensuring alignment between current technological capabilities and urgent needs. Furthermore, building a long-term, sustainable ecosystem is critical. Governments and industries should work together to address issues such as intellectual property, promote healthy and stable industrial development, and ultimately drive the intelligent transformation of enterprises.



X02, a Tendon-driven Highly Dynamic Humanoid Robot from Shanghai Droid Robot Co., Ltd, attended the Parallel Session on Artificial Intelligence Empowering New Industrialization and communicated with human participants