

Ningbo Companies on the Global Stage

# Building Tomorrow's Robots Today: Ningbo's Bold Leap into Humanoid Robotics

By Zhao Yu

On April 7, Ningbo marked a milestone in its push toward advanced manufacturing with the inauguration of Ningbo Puzhi Future Robotics Co., Ltd. and the Ningbo Embodied Intelligent Robotics Innovation Center at Joyson Group headquarters.

Puzhi Future, a 200-million-yuan joint venture between Joyson Group and Shanghai Zhiyuan New Technology Co., Ltd., will be the first in Ningbo to specialize in the production and sales of embodied intelligent robot systems. Its initial production line will deliver up to 1,000 humanoid and wheeled robots per year.

The 5,000-m<sup>2</sup> innovation center, also backed by a 200-million-yuan investment and operated by Puzhi Future, will focus on real-world scenario simulations, large-model AI training, and integrated hardware-software development.

As these projects ramp up, they are expected to inject fresh momentum into Ningbo's emerging humanoid robotics sector—raising key questions about the city's next steps.

## Powering the Robot-ics Supply Chain

"We were drawn to Joyson Group's ability to form close partnerships with upstream and downstream players," said Deng Taihua, Chairman of Shanghai Zhiyuan, at the inauguration ceremony.

On March 11, Shanghai Zhiyuan debuted its humanoid robot: the Lingxi X2. It can walk, dance, lift weights, balance on one wheel, and even ride scooters and bikes. But Deng emphasized that mass production depends on collaboration across the supply chain, which is key to reducing costs and accelerating commercialization.

He pointed to Joyson's strengths in this regard: "Joyson Electronics, a mainstay in China's top 100 electronics companies, has notable exper-



Hmanoid robotics. [Photo by Xu Neng]

tise in component integration. Its subsidiaries, like Xiangshan Co., Ltd. and PIA Automation, are making steady progress in critical robotic parts." Joyson's AI and Humanoid Robotics Institute has already rolled out version 2.0 of its J.A.R.V.I.S. (Joyson A Robot Vibrant Intelligent System).

The upgraded J.A.R.V.I.S. includes a modular external battery pack with a 4-hour runtime, a flexible LCD screen that displays emojis as the robot's "facial expressions", and, since February, an olfactory sensor that can identify 60 scents. It can detect a gas leak in 0.1 seconds and food spoilage and oxidation in 3 seconds.

Outfitted with 12 degrees of freedom in its hands, LiDAR, and advanced binocular vision sensors, J.A.R.V.I.S. is already taking on repetitive tasks in car factories—reliably performing the equivalent workload of eight people.

"These advancements open up real, scalable use cases for downstream adoption," Deng said.

## Driving the Next Industrial Leap

Humanoid robots—com-

binging intelligent control systems with agile, human-like mobility—are rapidly emerging as a next-generation strategic industry. Global market projections estimate the sector could reach \$154 billion by 2035, with annual sales climbing to 1.5 million units by 2030 and 8 million by 2035.

Regarded as a defining feature of new productive forces, humanoid robots are poised to follow in the footsteps of disruptive consumer products like smartphones, electric vehicles, and smart home appliances.

"Seizing this opportunity requires early strategic moves," said Wang Jianfeng, Chairman of Joyson Group. By 2025, Joyson aims to become a Tier 1 supplier in the automotive – robotics sector, leveraging its advanced automotive technologies to drive breakthroughs in the decision-making systems, motor control capabilities, and the physical limbs of humanoid robots.

For example, intelligent cockpit controllers developed by Joyson Electronics could serve as the robot's central processor, while precision actuators from its automotive safety division could enhance joint movement accuracy. The company is already supplying core components to lead-

ing robotics firms and has introduced its own olfactory sensors and dexterous robotic hands through its subsidiary NESINEXT.

"Today's launch marks a new beginning," said Wang Jianfeng, as Puzhi Future sets out to tailor robot systems for industrial applications and scale up commercialization. The company's initial 2,000-square-meter facility is projected to produce 1,000 humanoid and wheeled robots annually.

Industry observers say this level of output will not only enhance Ningbo's manufacturing credentials but also draw international players to its supply chain, laying the groundwork for the city to become a hub for humanoid robotics innovation.

Building on the momentum of the joint venture, the Ningbo Embodied Intelligent Robotics Innovation Center plans to invest 200 million yuan into a new facility spanning roughly 5,000 square meters. There, a dedicated team of robotics engineers, AI specialists, and industrial automation experts will carry out real-world scenario simulations, train large-scale AI models, and optimize software-hardware integration. The goal is to generate practical, market-ready embodied

intelligent robotic systems through continued development.

"Ningbo has both the advantage and the market potential to take the lead in humanoid robotics," said a representative from the Ningbo Municipal Bureau of Economy and Information Technology. The city has identified humanoid robotics as a strategic innovation focus and plans to direct policy tools and resources toward becoming a nationally competitive industry cluster.

In parallel, the city aims to foster a robust innovation ecosystem, drawing on its strengths in research, talent development, and enterprise collaboration. Through a coordinated strategy that integrates real-world scenarios, skilled talent, a robust manufacturing ecosystem, and sustainable investment, Ningbo aims to lay a solid foundation for the sector's long-term growth.

With Puzhi Future and the Innovation Center serving as anchor institutions, the city is now moving to connect upstream and downstream players into a collaborative innovation network—one that industry experts believe could unlock transformative opportunities for Ningbo's burgeoning robotics industry.

## Ningbo Sets New Standard with Return of the Badminton Asia Championships

By Jin Yuhan

The Badminton Asia Championships 2025 recently concluded, with Chooi Weng Sheng, Chief Operating Officer of Badminton Asia, offering high praise for Ningbo's second time hosting the prestigious event. In an interview, Chooi used three adjectives to describe the tournament: "passionate, innovative, transformative."

The BAC's return to Ningbo followed the success of last year's championships, which had already made a lasting impression on Chooi. "From the lighting and music to the overall atmosphere of the venue, Ningbo truly raised the bar, taking the Badminton Asia Championships to the next level," Chooi recalled.

Chooi returned with high expectations—and this year's event lived up to them. "The competition was seamless, and Ningbo put in tremendous effort to create an unforgettable experience for both the spectators and staff," he noted.

"From the very beginning, the players brought their A-game—this was a true showdown among Asia's top athletes," Chooi emphasized, pointing out that the lineup represented the pinnacle of badminton in the region.

Beyond the courts, the event featured an exhibition area filled with activities for fans. A giant mascot made a grand entrance, quickly becoming a popular attraction for photos. Merchandise from Ningbo's renowned Tianyige Museum, local snacks, and booths showcasing the city's travel destinations drew many visitors. Official championship merchandise was also a big hit.

Chooi praised the festive exhibition for adding a distinctive flair to the event, stating, "I want to commend the organizing committee and Ningbo for going the extra mile."

He also highlighted the event's sustainability initiatives, noting, "All official vehicles were electric, underscoring the committee's commitment to sustainability and environmental awareness."

In conclusion, Chooi encapsulated the tournament with three words: "passionate, innovative, transformative."

"I want to express my deepest respect for the organizing committee and the city of Ningbo," he said.

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## SPOTLIGHT

# Ningbo Companies Make Strong Showing at 137th Canton Fair

By Jin Lu

The 137th China Import and Export Fair (Canton Fair) is kicking off its spring session in Guangzhou, held in three phases from April 15 to May 5. Spanning 1.55 million square meters and hosting nearly 74,000 booths and more than 31,000 exhibitors, the event reaffirms its position as a cornerstone of global trade.

This year's fair has drawn nearly 170,000 pre-registered overseas buyers from 210 countries and regions, underscoring strong international demand. Among the most prominent delegations is Ningbo, which contributed over 4,000 booths—a new record and one of the largest re-

gional showings in the country.

Nearly 1,600 Ningbo-based enterprises are participating across all three phases, sending over 20,000 business representatives to showcase the city's manufacturing capabilities and commitment to innovation.

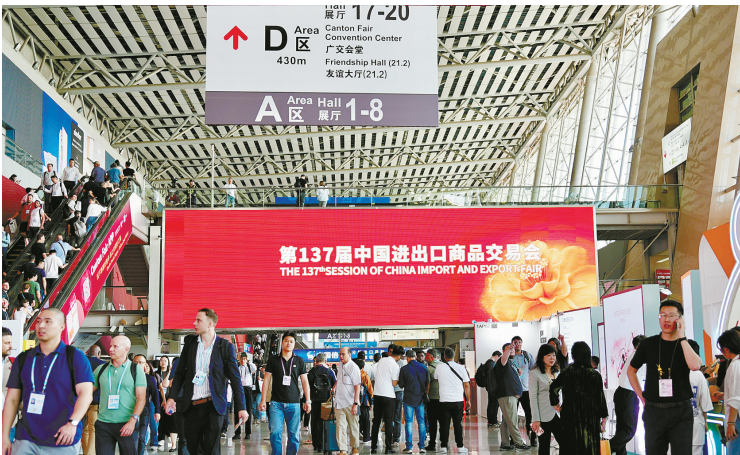
"In response to AI becoming increasingly mainstream, we introduced smart products like the high-speed AI-powered shaver," said Li Lizhong, Marketing Director of Yueli Group. "It features a digital motor and facial contour-sensing technology that adjusts pressure automatically. Innovation is what continues to drive Ningbo's manufacturing sector forward."

In a year marked by eco-

nomie uncertainty and mounting global trade pressures, the Canton Fair offers Ningbo firms a key platform to reach new markets.

"We attend every year, but this time it's more crucial than ever," said Chen Qiaoli, General Manager of Ningbo Meilian International Trade Service Co., Ltd. "It helps reduce our dependence on any single market and brings us in contact with new global buyers."

Other companies are using the fair to reposition their offerings. "We redesigned our safety products—originally tailored for North America—to better meet the needs of consumers in Southeast Asia, the Middle East, and Africa," said Hu Chenjie, General Manager



The 137th China Import and Export Fair (Canton Fair).

[Photo by Sun Yuzhou]

of Ningbo Xindajie Electric Co., Ltd.

For younger professionals, the fair also provides a chance to refine their business skills. "With such a diverse buyer base, it is the ideal environment for our Gen Z team

members to hone their negotiation skills," Hu added.

The strong showing by Ningbo companies at this year's Canton Fair highlights the city's ongoing focus on innovation, market diversification, and deepening global engagement.

