

China confers Friendship Award to foreign experts

Chinese Vice Premier Ma Kai said China will adopt more active, open and effective policies for attracting international talent and create an environment featuring fairness, rule of law, and tolerance.

The comments were made at a ceremony where the Chinese government conferred its Friendship Award on 50 foreign experts from 21 countries working in China, in recognition of their contribution to China's development.

China will encourage foreign experts participating in important research projects and create a better mechanism for these experts to get fair return for their contribution, Ma said.

The permanent residence system will be improved, and legitimate rights and interests of foreign experts will be protected, he added.

The Friendship Award is an annual award issued by the Chinese government to honor experts who have come to work in China. It was established in 1991.

AI increasingly used to tackle crime in China

Finding a lost child in a city of 10 million people could take the human eye forever, but AI technology can do things in just two seconds.

During Spring Festival this year, 3-year-old Xuanxuan was abducted by a stranger in the city of Shenzhen in south China. Without the help of AI, Xuanxuan may never have seen his parents again.

A local police station equipped with AI system used facial recognition technology to recognize the suspect after a two-second search of live video captured on thousands of security cameras. Police officers quickly identified the suspect, captured her on a train and retrieved the lost boy.

Recognizing images each containing millions of pixels used to be mission impossible for machines. But with the advancement of AI, scientists have developed systems capable of learning. Fed enough data these systems can learn to identify images such as faces and vehicles. The more they learn, the smarter they become.

Peng Ran, chief marketing officer of IntelliFusion, a company behind the

technology which aided Xuanxuan's rescue, said the impact of AI on public security was game-changing.

"The error rate of AI-powered facial recognition has been narrowed to a level lower than humans," Peng said. "It works with astonishing precision and efficiency, plus it never gets tired."

AI has made Shenzhen safer. In Longgang, Shenzhen's first district to embrace AI in public security, the crime rate is plummeting. In the first half of 2017, theft and robbery cases in the district dropped by more than half, and AI helped solve 67 percent of such crimes.

Wang Li, a 21-year-old hotel waitress in Shenzhen, usually asks her boyfriend to escort her when she goes home late at night. But she said she does not do it out of safety concerns but to test her lover's devotion.

"The city is perfectly safe," Wang said. "I've never been robbed, let alone assaulted."

Behind Shenzhen's success in bringing down crime is China's rapid advancement in AI technology. The State Council issued guidelines on developing AI in July, aiming to make AI a key economic driving force by 2020, and become a global AI innovation center by 2030.

In a recent report, investment bank Goldman Sachs said China had emerged as a major global contender in using AI to drive economic progress, and was fast catching up with the United States in AI.

Consulting Group iResearch predicts China's AI market will reach 9.1 billion U.S. dollars by 2020, with an annual growth rate of 50 percent.

Attracted by the lucrative market, tech companies are diving head first into the battlefield. At the 2017 China Intelligent Equipment and Robot Expo held September 22-24 in Guangzhou, exhibitors showcased AI products designed for security purposes, including smart locks, patrol robots and robot firefighters.

Gosuncn, an AI company based in Guangzhou, exhibited robots designed to defuse bombs, prevent fire, control crowds and spot crime.

Zhou Ke, marketing manager of the company, said their robots were well received by security companies, shopping malls and warehouses, because they could relieve humans from tedious and dangerous tasks.

"They are reliable, tireless and very smart," Zhou said.

AI may be smart, but plenty of people believe humans ultimately outsmart machines. Technology geeks claim that AI security measures can be fooled, and say they can bypass facial recognition with photos to access bank accounts.

Peng agrees that AI can be tricked, but not with people standing behind it. To counter criminal tricks, such as covering their faces, IntelliFusion is training its system to recognize clothes, body shape and even posture.

The company's AI system is also learning how people's faces change with age. Given enough training, it will be able to recognize people's faces based on their childhood pictures. Peng hopes this technology will help parents who lost their children many years ago.

Peng believes it could be ultimate solution to fighting human trafficking – a thorny problem that worries millions of parents across the nation.

"With the help of AI, no child will be lost in the future," Peng said.

China opens 2,000-km quantum communication line

A 2,000-km quantum communication line opened on Friday between Beijing and Shanghai.

Guests attend the opening ceremony of the Jing-Hu, or Beijing-Shanghai, Trunk Line, in Beijing, capital of China, Sept. 29, 2017. [Photo/Xinhua]

The line is the world's first trunk line of secure quantum telecommunications. The Jing-Hu (Beijing-Shanghai) Trunk Line connects Beijing, Jinan, Hefei, and Shanghai.

The line is connected with the world's first quantum satellite, which was launched by China in August last year, through a station in Beijing. The satellite is nicknamed "Micius," after a fifth century B.C. Chinese philosopher and scientist who has been credited as the first one in human history conducting optical experiments.

Bai Chunli, president of the Chinese Academy of Sciences (CAS), talked with staff in Hefei, Jinan, Shanghai and Xinjiang Uygur Autonomous Region, through the line. He also had a video call with Austrian quantum physicist Anton Zeilinger, through the satellite.

Quantum communications have ultra-high security. It is impossible to wiretap, intercept or crack the information transmitted through them.

China develops new rice strain to

avoid pollution

China has developed a new kind of rice free from cadmium pollution.

The project led by Yuan Longping, known as China's "Father of Hybrid Rice," passed examination and evaluation by a panel from the Chinese Academy of Agricultural Sciences and the Ministry of Agriculture on Friday.

Trial plantation of the new breed, low-cadmium Indica rice, was arranged in a township in Xiangtan County, central China's Hunan Province, in soil with 1.5 mg/kg of cadmium.

Sampling showed the cadmium in two samples at 0.06 mg/kg and 0.07 mg/kg, much lower than the national standard of 0.2 mg/kg.

Zhao Bingran, with Hunan provincial hybrid rice research center, said the low-cadmium rice was developed by genome editing and hybridization, without any exogenous gene.

Rice gene that absorbs cadmium is subtracted to get the new breed, said Yuan.

"The technology, a major breakthrough, costs low," he said.

Bai Lianyang, Party chief of Hunan provincial academy of agricultural sciences, said the new development would probably put an end to rice contaminated with cadmium.

In 2013, rice produced in Hunan Province was found to contain excessive levels of cadmium, a carcinogenic industrial chemical, which was largely believed to be caused by water and soil pollution.

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