AI robot takes college entrance math test

A robot sits for the math test during China's national college entrance exam, or gaokao, in the southwestern city of Chengdu, June 7, 2017. [Photo/sichuan.scol.com.cn]

A robot sat for the math test during China's national college entrance exam, or gaokao, in the southwestern city of Chengdu on Wednesday.

The robot, AI-MATHS, consisting of 11 servers, was developed by Chengdu Zhunxingyunxue Technology. It completed two versions of the exam's math test on Wednesday afternoon. There are several versions of the tests in different regions of China.

The robot finished the Beijing test in 22 minutes, scoring 105 points out of 150 points, without Internet support. It scored 100 points on another version of the test.

"It would take two hours for a human to finish the test. I hope next year the machine can improve its performance on logical reasoning and computer algorithms and score over 130," said Lin Hui, the company's CEO.

In February, the robot scored 93 on one math test, slightly higher than the passing grade of 90.

The company participated in a project of China's Ministry of Science and Technology, which plans to develop gaokao robots.

Under the plan, by 2020, AI robots will be smart enough to gain admission to leading universities such as Peking University and Tsinghua University through the entrance exam.

"This is not a make-or-break test for a robot. The aim is to train artificial intelligence to learn the way humans reason and deal with numbers," said Lin.

The robot has attempted 12,000 math questions, but an average high school student needs to solve 30,000 questions before taking the gaokao, he said.

AI may be faster than humans in dealing with numbers, but they are not good at processing language.

“For example, the robot had a hard time understanding the words ‘students’ and ‘teachers’ on the test and failed to understand the question, so it scored zero for that question,” he said.

Air Force to recruit female fighter pilots

The PLA Air Force will begin recruiting this year for a new generation of female pilots, the official PLA Daily reported on Wednesday.

Sources with the Air Force’s pilot recruitment bureau quoted by the paper said 35 candidates will be selected from high school graduates in 31 provinces, municipalities and autonomous regions.

The recruits who pass years of stringent training will go on to become the People’s Liberation Army planned 11th generation of female pilots.

Applicants need to have been born between Aug 31, 1997, and Aug 31, 2000, and be between 165 and 185 centimeters tall. Acceptable weight is between 85 and 120 percent of the Chinese people’s standard weight, which varies in accordance with age and height. There are also vision requirements, according to the report.

The last time the Air Force recruited female pilots was in 2013. The most notable differences between this year’s recruitment and the one in 2013 are that the height ceiling has been raised from 175 cm to 185 cm, and the area where candidates are being drawn from has expanded to 31 provincial-level regions instead of 20.

Wang Ya’nan, editor of Aerospace Knowledge magazine, told China Daily that the height restriction has been relaxed because Chinese women on average have gotten taller and the military does not want to narrow the field.

Applicants must take part in the national college entrance exam and their total scores must meet requirements set by local education authorities to qualify them for Air Force selection, which will start this month and end in July, PLA Daily said.

Fu Qianshao, an aircraft expert with the PLA Air Force, said the courses and training for female pilot candidates are the same as those for male

candidates. They will learn from textbooks, take part in flight training on basic and advanced trainer aircraft and will graduate after at least six years at the Air Force Aviation University and flight academies.

China enrolled its first female pilots in 1951 and since then about 580 belonging to 10 generations have joined the Air Force. The first seven generations of female pilots flew only transport planes.

In the selection for the eighth generation in 2005, the Air Force began to open the post of fighter jet pilot to applicants and more than 200,000 female graduates from high schools around the country applied. A total of 35 were selected and sent to the PLA Air Force No 3 Flight Academy and 16 of them graduated and became fighter jet pilots.

The ninth generation of female pilots, also numbering 16, were taught to fly fighter jets, graduated in 2013 and also joined the Air Force's combat units.

The most recent generation, the 10th, including 40 women, joined the Air Force in 2013. By now, 13 have been disqualified in training while 27 completed their first solo flight in March, according to the Air Force.

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12 injured in Taiwan gas explosion

Twelve people were injured in a gas explosion at a food processing factory in Taiwan's New Taipei City Wednesday morning, according to the local fire department.

The explosion ripped through the factory at around 11:27 a.m., with five men and seven women hospitalized.

More than 140 firefighters and 53 emergency vehicles arrived at the scene.

Preliminary investigation showed the explosion was caused by a gas leak.

Further investigation is underway.

9.4 mln students sit China's college entrance exam

A total of 9.4 million Chinese students Wednesday began the annual national college entrance examination, known as the Gaokao, which will have a large

impact on their futures.

According to the 2017 enrollment plan issued by the Ministry of Education, some 3.72 million of these students are expected to enroll in undergraduate degrees following the examination, nearly 10,000 more than in 2016. However, competition is fierce to get into top institutions.

Local authorities have taken extra measures to eliminate cheating, which, since last year, can be treated as a criminal offence. Increasingly sophisticated cheating methods have impaired the integrity of examination, which is intended to be a level playing field.

In east China's fiercely competitive Shandong Province, the local education department has ordered college students not to ask for leave during the examination period, except in special circumstances, to prevent them acting as substitute exam takers.

"The whereabouts of absentees who do not have sufficient reasons must be investigated. Stricter procedures must be followed in approval of leave requests," according to a directive issued by the department.

Zhang Zhiyong, deputy director of the department, said, the move "aimed to eliminate problems that may enable cheating."

Police in central China's Henan Province, which has the most exam takers at more than 860,000, have arrested 16 people suspected of operating businesses related to exam cheating. They have confiscated equipment including signal emitters, cell phones and laptops.

In Beijing, which has more than 60,000 exam takers, local authorities have stepped up management of examination papers. The papers were delivered to the city's 92 examination sites under police escort. The deliveries were monitored by GPS positioning and video surveillance systems.

"My family was poor and couldn't afford to send me to the college, so I started working as a teenager," said Du Wanjun, father of a Beijing exam taker. "But now, all children can compete for university places and many can succeed. I'm really happy for them."

He said he does not hold expectations for high exam results. "I hope my daughter can relax and try her best. The Gaokao is just an experience," said Du, who unlike many parents left the campus without looking back.

Some parents are not as calm as Du. In the city of Changchun in northeast China's Jilin Province, a mother told Xinhua that she got up at 4 a.m. to cook a breakfast of carp for her child.

There is an ancient Chinese legend about a carp that jumped over a high gate and became a dragon, which is often used as a metaphor for academic and career success. "I chose carp to wish my child a 'leap' in the exam," said the woman as she waited anxiously outside the exam site.

This year marks the 40th anniversary of resumption of the Gaokao after it was

disrupted by the Cultural Revolution (1966-76).

In recent years, many high school graduates have chosen to attend overseas universities. However, the overwhelming majority of Chinese students and parents regard the Gaokao as a fair way for Chinese universities to select students for enrollment and a competition they cannot afford to lose.

A report released by China Education Online showed that the number of students taking the exam has declined from its peak of 10.5 million in 2008, and has remained stable at around 9.4 million since 2014.

China discloses Chang’e 5 lunar probe landing site

China’s Chang’e 5 lunar probe is expected to land in the Mons Rumker region, and to take moon samples back to earth at the end of the year, according to a Chinese space official.

Liu Jizhong, director of China Lunar Exploration and Space Engineering Center of China National Space Administration (CNSA), for the first time disclosed the probe landing site, an isolated volcanic formation located in the northwest part of the Moon’s near side.

Liu also mentioned China’s Chang’e 4 lunar probe. Delivering a report at the Global Space Exploration Conference, which opened in Beijing Tuesday, he said China’s Chang’e 4 lunar probe, which is expected to be the first human carrying probe landing on the far side of the moon, would be launched in 2018, carrying 11 scientific payloads, including four developed by other countries.

He said lunar exploration had many international cooperation opportunities and that constructing the international moon village or international research station, proposed by European Space Agency (ESA), was also a long-term goal for China.

“China is planning and designing its future lunar exploration program. We will focus on the south pole region of the moon. The research on water and the permanent shadow area of the lunar south pole region will bring greater scientific discoveries,” Liu said.

He said that China would push forward international cooperation in exploring the south pole of the moon, constructing lunar scientific research station and establishing long-term energy supply and autonomous infrastructures.

Liu proposed jointly exploring the lunar polar region and constructing the scientific research station as a guide for the international moon village or

station, following international law.

He also proposed creating an open platform for cooperation in accordance with the principle of “sharing the risks and achievements,” and to set up the International Union of Planetary Scientists and the International Union of Planetary Science College Students.

He said scientists from different countries might jointly formulate scientific objectives, develop scientific payloads and carry out scientific data research.

“Partners may develop probes and facilities independently, which will complement each other. Enterprises are also encouraged to actively participate in lunar exploration,” Liu said. “Intergovernmental cooperation should be strengthened, and governments should co-ordinate existing deep space exploration infrastructures to share the resources and enhance investment efficiency.”

At the conference, Wu Yanhua, vice administrator of CNSA, honored the international partners of China’s Chang’e 4 mission, which will carry payloads from the Netherlands, Germany, Sweden and Saudi Arabia.

Since China proposed international cooperation on the Chang’e 4 mission last year, China has received more than 20 schemes from other countries.

“We support more international cooperation in China’s future lunar and Mars missions, as well as exploration to the Jupiter system and asteroids that are still under discussion,” Wu said.

“It is exactly what I was looking forward to,” said Jan Woerner, director general of the ESA. “It will fit perfectly to the moon village, ESA’s vision for international cooperation on the moon.”