A visitor tries a self-driving system at an auto expo in Hangzhou, capital of Zhejiang province. LI ZHONG / FOR CHINA DAILY

China expected to gain an advantage in self-driving technology

Government may issue first nationwide license plate for testing driverless cars in June as country takes strides toward introducing new systems

By JING SHUIYU
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Burgeoning self-driving technologies are expected to give China an edge in advanced driver assistance systems, algorithms and software, analysts said.

Such systems, which mainly include radar, cameras and ultrasonic sensors to enhance safe driving, currently have a relatively low market penetration rate in China.

"The rate in China is between 3 and 6 percent, while that in the United States or Europe is about 8 to 12 percent," according to Zheng Fangdan, a senior consultant at Chinese research company CCID Consulting.

Thanks to the push for driverless cars, the country's market for advanced driver assistance systems is expected to grow to 87.7 billion yuan ($13.5 billion; 11.2 billion euros, £9.9 billion) in 2020 from 11.7 billion yuan in 2015, Zheng said at a recent seminar.

The uptrend in China corresponds with estimated global figures.

According to a Goldman Sachs report, the market for advanced driver assistance systems and autonomous vehicles is projected to grow from $3 billion in 2015 to $96 billion in 2025 and $290 billion in 2035.

Algorithms and software, the "key building blocks" in delivering autonomous cars, will see substantial growth in the future, Zheng said.

Yu Jie, co-CEO of Beijing-based JointWyse Automotive Co, agreed. "We predict further strides in software capabilities for interpreting visual and other inputs driven by sensors to make fully autonomous driving a reality," he said.

Demand for sensors, networking and other elements vital to autonomous driving will also be created, he added.

Their comments came as China has been working to clarify the legal landscape for autonomous vehicles, which are in the fast lane to commercial availability.

Last month, the nation's first guideline on road tests of autonomous motor vehicles was released by local authorities in Beijing.

Later, the Ministry of Transport said it would conduct research before issuing policies this year on autonomous technologies.

The government might issue the first nationwide license plate for testing driverless cars in June, Zhu Xichan, a professor from the School of Automotive Studies of Tongji University, said at the World Autonomous Vehicle Ecosystem Conference in November.

Though the promise of autonomous cars is exciting, "innovation comes with risks", said the report from Goldman Sachs.

"Turning control over to software could lead to new hacking vulnerabilities and other hazards — liability issues that companies can't ignore. Cars that allow drivers to intervene in emergencies is a more likely scenario," the investment bank said.

Companies will likely focus on fine-tuning partial automation over the next few years, to overcome software challenges facing self-driving vehicles, it said.

AI meets clothing retail in 'magic mirror'

By HE WEI in Shanghai
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The application of artificial intelligence has gone far beyond driverless cars or futuristic robotics that outsmart humans in the strategy board game Go.

In China, AI is playing a vital role in changing shopping experiences by using algorithms to track, analyze and satisfy each consumer's specific needs.

In the latest instance, shoppers in Guangdong province are among the first group to experience smart clothing recommendation powered by an intelligent fitting room

in apparel stores such as Jack & Jones and Vero Moda.

Through facial recognition technologies, a "magic mirror" system allows customers to immediately view themselves in the clothes they pick, according to Bestseller A/S, the company behind the brands.

By factoring in gender, age, climate and other considerations, it can swap those clothes for other recommendations, removing the need to constantly shuttle between clothing racks and changing rooms.

To use such services, customers must first activate the brands' virtual membership card via WeChat, China's most popular

chat and payment app, and allow for facial payment.

China's tech giants wasted little time before opting for AI-backed retail.

During the annual Nov 11 shopping festival, Alibaba Group Holding Ltd supported Shiseido in installing an electronic mirror that allowed customers to try lipsticks virtually and complete the purchase with a few taps on a smartphone screen.

Designer apparel shop Alain de has offered such smart mirrors since October, and responses have been brisk, according to Chen Huaiyu, a store chief at the

brand's outlet in Joy City, a mall in Shanghai.

"If you pick a pair of jeans, the machine will present five alternatives in 10 different colors," she says. "It can also recommend the most suitable tops, bags and other accessories to go along (with) your selection, effectively boosting our sales."

Smart recommendations and virtual fitting rooms are set to be a huge business reshaping the retail sector, says Huang Zhongsheng, co-founder and CEO of Haomaiyi, which provides such technology for Alibaba's Tmall site.

Mobike motors into car-sharing market

By YANG JUN in Guiyang and
OUYANG SHIJIA in Beijing

Bike-sharing titan Mobike Technology Co Ltd officially launched its car-sharing service in China's southwestern Guizhou province recently, marking the company's first attempt to expand into the short-term car-rental market.

The Beijing-based company said on Dec 29 that the first new energy vehicles would be rolled out in the Guian New Area and Guiyang in Guizhou province. Users will be able to unlock, park, lock and make payments with the same app they use to rent shared bikes via a newly added car-rental feature.

200 million

the number of users that Mobike has amassed in more than 200 cities in 12 countries.

The official launch of shared cars came shortly after Mobike announced in November a strategic partnership with the Guian New Area and Sitech, a local electric car company, to launch a fleet of shared automobiles, aiming to seek new momentum in the market outside its core bike-sharing businesses.

Mobike CEO Wang Xiaofeng says the partnership will help to develop a smart and green transportation system, as Mobike has strengths in technologies such as internet of things and mobile internet, and the Guian New Area and Sitech have advantages in new energy resources and electric charging points.

"Buoyed by internet of things technologies, the new shared vehicles will be connected to Mobike's shared bikes, which will meet local residents' diversified travel needs and become a favorable means to complement the public transportation system," he adds.

Mobike's expansion into car-sharing comes as the company's bike-sharing business has stabilized and the domestic bike-sharing market has matured.

Mobike has amassed more than 200 million users and operates over 8 million shared bikes in more than 200 cities in 12 countries, including Singapore, the United Kingdom, Italy, Japan, the United States and Thailand.

"Actually, the shared cars can provide an alternative tailored traveling choice for users, and the potential for the future market is huge," said Zhang Xu, a Beijing-based internet analyst, in an earlier interview with China Daily.

A report released last year by PwC's strategy consulting business Strategy& supported Zhang's view, saying the total fleet in the domestic car-sharing market amounted to around 30,000 vehicles at the beginning of 2016, and the overall market will continue to grow rapidly at a rate of over 50 percent.

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