# 《China Breakthroughs: Building AI centers for a new era》

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Global business consultants, who spot trends in the science & technology sector, are forecasting major VC (venture capital) investments in robotics, IoT (Internet of Things) and AI (Artificial Intelligence) for this year and beyond.

KPMG, one of the top four international accounting firms, issued a report earlier in January predicting AI would top the list for Chinese VC investments in 2017.

The Chinese government has called for greater support of entrepreneurship and encouraging the Chinese to embark on a new wave of innovations. Beijing pledged subsidies for start-ups and to promote collaboration among academia, government and private firms.

Big name Chinese companies, such as Baidu (Chinese search engine), Tencent (WeChat operator) and Didi (driver APP service) have opened up AI R&D (research and development) centers.

Deep learning and more

AI researchers are developing technologies that can transform our world. You might soon see humanoids (robots that appear human) performing regular job functions, AI devices for people to communicate with and the age of driverless cars.

An AI brain could engage in conversations with people and to assist them in daily affairs, which includes shopping (e-Commerce), medical treatment (telemedicine) and friendly chats to overcome loneliness.

To create an amazing future, Chinese hi-tech giants have set up AI centers and asked scientists to explore all avenues of advancement.

Baidu Inc. has become the leading AI investor in China. Zhang Yaqin, the company's president, spoke at the 2017 Summer Davos Forum in Dalian. He's calling for more Chinese companies to grasp opportunities in AI.

Baidu opened a 'Deep Learning Lab' in Silicon Valley in 2013 and has invested more than 50 percent of total revenues into AI research.

Baidu's AI strategy

Baidu has poured RMB10bn. (US$1.46bn.) in AI R&D worldwide. Its cornerstone system is Duer, serving as the software program for AI, which can be applied to home devices, driverless cars and Baidu Cloud.

Baidu believes China is setting the benchmark for the emerging AI Revolution.



"Even though the US enjoys an advantage in the development of algorithms, China's edge lies in its huge base of data," Zhang told China Daily. "We are fortunate (to live) during this, time of AI technologies."

He added, "We are fortunate China is moving to the center stage."

Andrew Ng, chief scientist for Baidu, is directing the company's AI research in Sunnyvale, Ca. He has led huge advancements by rolling out a neural network-based machine for speech recognition in AI that is proven to surpass human capabilities.

High-level work impact

Chinese researchers have focused on machine learning to convert AI technologies into commercial use.

The Chinese companies are working over-time to introduce innovations and to utilize big data analytic reports that can be sold to retailers, marketers and consultants.

"The velocity of work is much faster in China than in most of Silicon Valley," Andrew Ng told Atlantic. "When you spot a business opportunity in China, the window of time you have to respond is usually very short - shorter in China than the United States."

Baidu has also opened an AR (augmented reality) lab in Beijing that is using computer vision and deep learning to develop more enhanced facial recognition technologies and other hi-tech upgrades.

The 55-person lab is looking to increase revenues by building AR marketing tools that include applications for healthcare and education online services.

WeChat big data

Another key player in China's AI development is Tencent, owner of WeChat, China's largest Social Media site with reportedly over 846 million active users as of the end of 2016.

WeChat remains popular among Chinese users and is considered the Chinese version of Facebook, but even better since users can make WeChat payments on their smartphones.

Tencent has access to huge amounts of consumer data and can study news and retail trends by analyzing WeChat users purchasing and chatting activities with the information collected and stored.

Tencent is collaborating with Hong Kong University of Science & Technology to analyze WeChat's big data reports. Tencent has sponsored scholarships for students studying under computer science professor Qiang Yang.

Students are assigned to review data from WeChat and to submit reports on what's trending. The students are offered jobs at Tencent after graduating.

Global collaboration

Chinese researchers have made remarkable progress in AI in recent years. The world-renowned organization, Association of the Advancement of Artificial Intelligence, claims to have a strong presence of Chinese scientists.

Additionally, Israeli Prime Minister Benjamin Netanyahu visited China on a 3-day state visit last March and signed a China-Israel collaboration deal.

Chinese companies would invest US$10 million to open AI R&D centers in Beijing, Hangzhou and Haifa, Israel, working in tandem with the Chinese Academy of Sciences and the University of Haifa.

The new AI centers would conduct studies on how to commercialize AI with plans to convert it into industrialization, which includes developments on vision tracking via mobile devices, image processing and using big data reports for medical applications, 3D image learning, computer chips technology and biometric identifications.

We can anticipate that any new technologies that will be introduced to the public in the future would in some way be connected to AI.

Accordingly, AI will be the future of science & technology and China is expected to be a global leader in the field.