

stars insights: 4 July 2019

Alibaba's Senior AI Advisor: "Voice is AI's Next Frontier"



*In an exclusive stars interview, Dr. **ZHANG Wan**, Senior Advisor at Alibaba AI Labs in Hangzhou, explains how Alibaba uses AI to take over repetitive tasks and to free up their employees to pursue more creative projects. As a linguist, she is convinced that voice is the next frontier for AI, but also that language is still a big obstacle for Chinese companies who want to bring their AI technologies abroad. The interview was conducted by Patrick RENZ of foraus (Swiss Forum on Foreign Policy) at the sidelines of the stars Singapore symposium 2019.*

Patrick RENZ: Can you give us an example where AI has been used to replace repetitive human tasks at Alibaba?

ZHANG Wan: On our website, we display banners that suggest products to you according to your preferences and shopping records. Each time you click on the banner, it will change. Originally, we had designers producing these banners, which was a very time consuming and repetitive task. Therefore, we decided to use AI technology to automatically generate banners based on your preferences and shopping records, thereby setting our designers free to pursue more creative and meaningful projects.

What is the next AI frontier you are currently working on?

Our vision for AI is to get every aspect of our lives connected. We want to use a customer's voice ID for online shopping and to make payments and we want to help him control all household appliances with his voice. We are currently looking into changing the form of our products as we want people to interact with computers in a natural way. This does not mean human-like robots, but something that people would feel comfortable to communicate with more naturally. Beyond the form of our products, this heavily focuses on moving away from voice commands to a more natural form of speaking. People do not

have much time and should not need to learn how to use our devices, they should be able to speak with them as they speak to a human being.

What plans do you have to go abroad with your AI technology?

For a long time, Chinese companies have been focused on the domestic market. This is however changing now and companies are starting to sell their technology overseas. The acceptance of AI is closely related to a society's culture and their behavioural ethics. This is why in different countries, there are different perspectives on the AI industry and AI technology. In Europe for example, the society's demand for privacy is higher than in China, making them more reluctant to share data and thereby complicating the implementation of AI. A good example for this is the acceptance of smart speakers in your home. In general, Chinese are much more open to this than Europeans.

Since you are a linguist, what role does language play in this?

Language is a big obstacle for Chinese companies bringing AI abroad. Depending on where you want to go you have to train your AI in the local language and its dialects. Even if you stay in China this is already a huge challenge as there are multiple dialects. I give you an example: Imagine the map of Shanghai's subway system – one of the largest in the world – and the ticketing machines used to buy a ticket there. These are not user-friendly for the millions of tourists visiting Shanghai each year. Some of them simply do not know how to use a touchscreen. Voice interaction could enable these customers to just say “bring me to station XYZ” and thereby make their lives easier. However, when we introduced an AI kiosk in a Shanghai subway station, we encountered issues with tourists from regions and countries where they have a strong dialect when speaking Mandarin. This is an important area where we are currently working towards improving our AI technology.

What leadership skills is Alibaba looking for when recruiting new talent?

Alibaba is looking for future leaders with a “customers first” attitude. This reflects our company's culture and values. Beyond that we are looking for an entrepreneurial spirit and independent thinking which is why we hire more and more people who have built their own company and bring experience in running independent projects.

*As a Doctor in Linguistics, **ZHANG Wan** studied language evolution and the cognitive mechanism of human languages. She then joined [Alibaba Group](#) in Hangzhou, China, where she leads a User Experience designer team and works as linguistic consultant for AI products. Wan collaborates with Alibaba's DAMO academy to develop intelligent kiosks and robots used in subway stations, shopping malls, and restaurants. She also works on establishing a joint lab with Alibaba AI Labs to compile knowledge maps and to develop a dialogue strategy to increase the usability of chatbots and smart speakers.*

The views expressed here are solely those of the interviewee and they do not necessarily represent or reflect the views of the stars Foundation.

[stars insights](#) are exclusive contributions by business leaders and experts who scan the horizon to discuss geopolitical, economic, technological and further trends and developments which will impact society and business in the next few years.