Alibaba Group and Tsinghua University Announce Joint Lab on Natural Human-Computer Interaction Research

Beijing, April 3, 2018 – Alibaba Group Holding Limited (NYSE: BABA) today announces a partnership with Tsinghua University to establish a joint-research lab that focuses on the natural experience for human-computer interaction (HCI).

This is the first HCI-focused joint-research lab that Alibaba has unveiled since the Group launched an innovative global research program, “Alibaba DAMO Academy,” in October last year. The program will focus on both fundamental and disruptive research, with HCI identified as one of the key areas.

Today’s new partnership will see both parties collaborating on frontier technologies including multi-source emotion data analysis, affective computing, tangible interaction, and multimodal perception and interaction, all of which are fundamental in driving the advancement of HCI study. Researchers from both parties offer a diversity of expertise in cognitive science, linguistics, physiology and aesthetics and will come together to spearhead different research projects. Prof. Yingqing Xu, Director of The Future Lab at Tsinghua University and Paul Fu, Senior Director of User Experience for Alibaba Group, will lead the lab’s operation and set the research directions.

Jeff Zhang, Chief Technology Officer, Alibaba Group said, “Graphic interfaces and the touchscreen have demonstrated how new ways of interaction could be key to the information revolution. As artificial intelligence and data technologies advance, humans’ senses and emotions could become the new modes of interaction with machines.”

Zhang added, “We are excited about the prospects of another wave of the information revolution based on new HCI, and it is our honor to have a distinguished partner like Tsinghua University to join us in leading a breakthrough in next-generation HCI research.”

Prof. Bin Yang, Vice President of Tsinghua University said: “By helping machines better understand and communicate with humans, HCI is expected to revolutionize various industries and have a profound impact on how we work and live.” Yang added, “Tsinghua University is a global research institute with the leading edge in a wide array of fields including computer science, engineering, liberal arts and design, while Alibaba has rich experience in product development and design in the HCI field. We are confident that the joint lab and a group of global talents will yield fruitful research results in the near future.”

The lab’s technology innovation is expected to be applied within a wide array of commercial scenarios including New Retail, autonomous driving and smart living. It is expected that in the future, when human emotions or affective state are better understood, multi-module interaction that involves two or more of the five senses - visual, auditory, speech, touch and smell - will become a common mode of interaction with machines.

For example, consumers’ preference towards a product can be captured digitally to help merchants produce better product designs and personal recommendations informed by feedback from the consumers’ affective state. Also, studies have shown that drivers’ reaction to touch stimulation is much faster than their reaction to visual signals, implying prospects for auto cockpit redesign that combines both visual and touch interfaces for safer driving.

Alibaba has been a pioneer in both fundamental technology research and its commercial application in areas such as speech recognition and visual recognition. In December 2017, Alibaba introduced far-field voice-recognition technology to the ticketing kiosks in Shanghai metro stations to enable faster ticket purchasing. Through combining signal-processing and computer-vision technology, technology from Alibaba has enabled sound identification and solved the problem of intense noise disturbance in a more effective manner.

As a global research institute, Tsinghua University has solid research background in areas including natural interaction experience, multimedia computing, multi-user sharing interface management and multimodal human-computer interaction.
About Alibaba Group
Alibaba Group's mission is to make it easy to do business anywhere. The company aims to build the future infrastructure of commerce. It envisions that its customers will meet, work and live at Alibaba, and that it will be a company that lasts at least 102 years.

About Tsinghua University
Established in 1911, Tsinghua University is a unique comprehensive university bridging China and the world, connecting ancient and modern, and encompassing the arts and sciences. As one of China’s most prestigious and influential universities, Tsinghua is committed to cultivating global citizens who will thrive in today’s world and become tomorrow’s leaders. Through the pursuit of education and research at the highest level of excellence, Tsinghua is developing innovative solutions that will help solve pressing problems in China and the world.

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