CSCI 77800: Ethics and Computer Science

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Ethical Concern (CS issue)

China Focus: Getting to know China's first AI-powered virtual student

http://www.xinhuanet.com/english/2021-06/06/c_139992397.htm

Hua Zhibing, China's first virtual student, is developed on a record-breaking AI modeling system named Wudao 2.0. She started her study at the Department of Computer Science and Technology at Tsinghua University. Hua Zhibing is powered by a homegrown large-scale artificial intelligence (AI) system.

The work behind Wu Dao 2.0, which is dubbed as China's first homegrown super-scale intelligent model system, was led by BAAI Research Academic Vice President and Tsinghua University Professor Tang Jie. He was supported by a team of over 100 AI scientists from Peking University, Tsinghua University, Renmin University of China, Chinese Academy of Sciences and other institutions.

Hua Zhibing is a very talented student. She can compose poems and music, generate pictures, has reasoning abilities, learning abilities, constantly "learn" the patterns implicit in the data, can sing and has a sweet voice and very real human look. Hua Zhibing was very close to pass Turing test (when significant number of people can not tell apart AI from human) in several areas. How will real human students feel themselves to be in the same classroom with virtual student and how ethical is it? I guess there can be different views on that… Like a medal which has two sides… Based on the photographs and video Hua Zhibing likes absolutely like a real person, I could not tell apart one from another. She can not even be compared to previous models of humanoid robot (Sophia, Geminoid, Jia Jia, Chihira Aico and others). Hyper realistic skin, voice, and even emotions, hyper realistic walking like a human

Breakthrough technology can start the era of new "tool", which can serve the world at the best possible and the worst possible ways. If virtual student can learn to create, in a particular environment that same student can learn to destroy. This is the exaggeration (hopefully), but it is scary how it can be implemented in military and be used in warfare not for defense but invasions. Comprehensive government law needs to be in place. With the speed of a technological progress, humanoid robots can become an affordable norm for majority of the people. ENIAC was unique for some time only decades ago. Only research institutes and universities had access to it. Now days, toddlers get computers and gadgets as a birthday or holyday gift. May be one day virtual friends like Hua Zhibing will be birthday gift for kids. Like Tamagotchi. It is imperative that the law goes along with technological advancement. We all have future of our children in our hands. Previous models of robots were mostly for physical assignments in the environments dangerous for humans, they can assist in disaster response, function in temperatures not tolerable by people, perform heavy duty task. Now robots are able to recognize faces and human emotions, they can seat in the same auditorium as human students and learn the same material. It is now a different level – intellectual. They can help to solve multiple problems – psychological condition of people, help with home stuff, take care of children…

As a teacher I am concerned about the self-esteem of the students who is in the same learning environment with virtual student. How would they feel that no possible way they can keep up with the virtual student? What if the robot learns a negative behavior from some students? Data input might cause unintended output…