AI child unveiled by awardwinning Chinese scientist in Beijing

The artificial intelligence entity can independently assign tasks and learn autonomously.

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She is capable of autonomous learning and "has her own joy, anger and sorrow", according to a video posted by BIGAI.

"Tong Tong possesses a mind and strives to understand the common sense taught by humans. She discerns right from wrong, expresses her attitudes in various situations, and has the power to shape the future," the video says.

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In terms of general artificial intelligence standards and testing tasks, Tong Tong displays behaviour and abilities akin to those of a three or four-year-old child. Through exploration and human interaction, she can continually improve her skills, knowledge and values.

A key aspect of general intelligence, as one researcher explained, is having physical and social common sense akin to humans. Driven by its own values, an AI entity should not only be capable of completing an infinite array of tasks, but should also define new ones autonomously.

"To advance towards general artificial intelligence, we must create entities that can comprehend the real world and possess a wide range of skills," BIGAI director Zhu Songchun said.

Zhu, who spent 28 years studying, living and working in the <u>United States</u>, left his professorship at UCLA in 2020 to establish BIGAI back in China.

As a world-renowned scholar in the field of AI, his research areas include general artificial intelligence, computer vision and <u>autonomous</u> robots, among others.

He has received the ONR Young Investigator
Award from the US Naval Research Laboratory
and the Marr Prize from the International
Conference on Computer Vision, one of the
highest awards given for papers in the field.

He has also served as chairman of the Conference on Computer Vision and Pattern Recognition and vice-director of the IEEE Computer Society Fellow Evaluation Committee.



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How does China's AI stack up against ChatGPT?

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Also showcased at the exhibition was the Tong Test, a platform for AI testing published by Zhu's team in the journal Engineering hosted by the Chinese Academy of Engineering in August last year.

Traditional AI tests, which focus on human identification, task orientation and virtual environment testing, each have their limitations.

The Turing Test, for example, can only assess an AI's communication level with humans, not its intelligence. Task-oriented tests may lead to AI systems learning tasks too specifically, thus losing their ability to generalise. Virtual

environment tests, while creating realistic experiences, tend to oversimplify physical environments.

The Tong Test assesses five dimensions – vision, language, cognition, motion and learning. It also encompasses a value system ranging from physiological and survival needs to emotional and social values, and even group values.

"With nearly 100 specialised tasks and more than 50 general tasks, the Tong Test offers a complete testing regime for the development of general artificial intelligence," the institute said in a statement on its website.

"For general AI to integrate seamlessly into human environments, it must learn and execute tasks in complex settings, driven by values and an understanding of causality. This is why we proposed the Tong Test, a new direction for testing general AI, focusing on practical abilities and values," Zhu was quoted as saying in the statement.

"Our research will guide general AI in learning and improving its capabilities more effectively and safely, ensuring it serves human society better."

Science fiction has now become reality with the creation of Tong Tong, a girl who is the world's

first virtual <u>artificial intelligence</u> (AI) entity, developed by Chinese <u>scientists</u>.

Tong Tong, or Little Girl in English, the AI entity was unveiled at the Frontiers of General Artificial Intelligence Technology Exhibition held in Beijing on January 28-29, under the auspices of the Beijing Institute for General Artificial Intelligence (BIGAI).

There, exhibition visitors could interact with Tong Tong. When programmed to like things tidy, she would fix a crooked picture frame on her own. If the frame was too high for her to reach, she would find a stool so she could straighten it without any help from a human. Also, if someone spilled milk, she would find a towel and clean it up by herself, showing her ability to interpret human intentions.



Tong Tong, a girl who is the world's first virtual artificial intelligence (AI) entity, developed by Chinese scientists. Photo: stdaily.com

Unlike popular <u>large language models</u> in AI, Tong Tong can independently assign tasks to herself, ranging from exploring her environment to tidying rooms and cleaning stains.