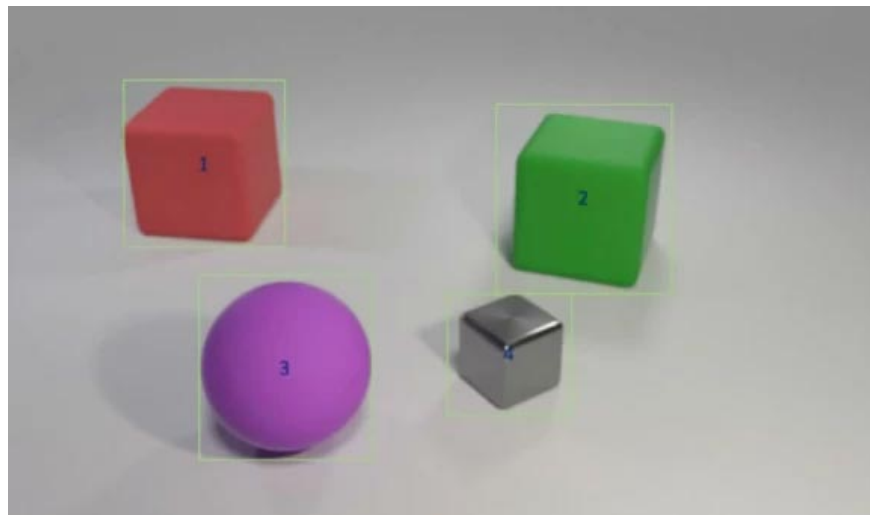


MIT AI model can capture the relationship between objects with the minimum amount of training data

Deep learning systems work by selecting statistical patterns in data - that's how they interpret their own worldview. However, this method of statistical learning requires a large amount of input data ...

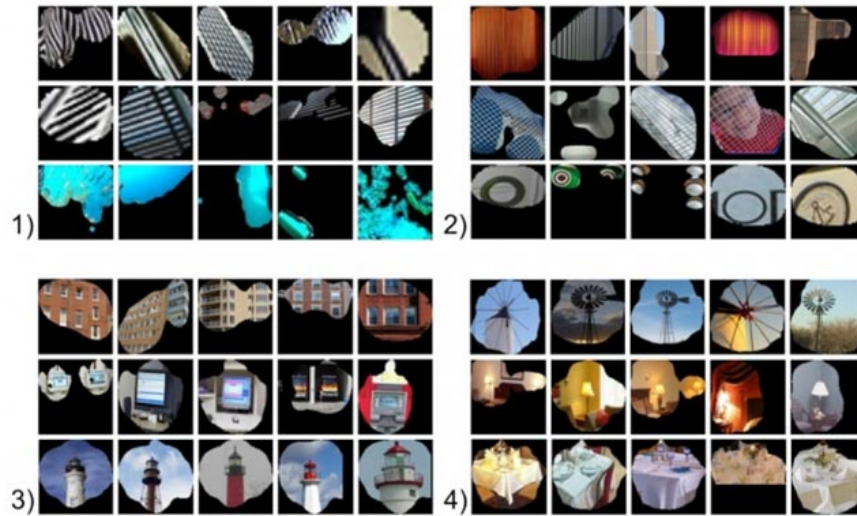
Deep learning systems work by selecting statistical patterns in data - that's how they interpret their own worldview. However, this method of statistical learning requires a large amount of input data, and is not particularly useful in helping deep learning systems apply knowledge from the past to new situations, unlike as symbolic AI (symbolic AI), allows to record the sequence of steps taken to make decisions with less data than traditional methods.



1. The 'Nobel technology' award is awarded to AI-teaching software as human

A new study was conducted by a group of artificial intelligence scientists at MIT, MIT-IBM Watson AI Lab and DeepMind showing the potential of symbolic training methods AI when applied to a specific task, eg capture the meaning of images. Accordingly, in the experiments, the AI ??model of the scientists learned concepts related to objects such as color and shape, and then used that knowledge to create relationships between many object in a scene, while only requires minimal training data and does not need to be programmed clearly.

'We all know that using a combination of words and illustrations is an effective way to help children learn and remember a specific concept. Our idea of ??this symbolic AI model is the same. As a result, the system will need less training data, while being able to transfer knowledge that it has acquired to better new situations, 'said computer scientist Jiayuan Mao, who heads the project. study sharing.



1. Google researchers for gaming AI to improve enhanced learning ability

Basically, this AI model consists of an information receiving component, which helps transform images into object-based interpretations, and a language class that extracts meaning from words and sentences. , then create 'symbolic programs' that help AI know how to answer questions. In addition, there will be an additional third module running icon programs on the background and giving an answer, updating knowledge to the AI ??model when it makes a mistake.

Researchers have trained this AI model on images associated with many relevant questions and answers. The ability to understand the image of the AI ??is then monitored by Stanford University. In general, AI must answer questions like: What is the color of the object? How many objects are next to another object? Or what material is this object made of? The complexity of the questions will naturally increase with the level of the AI ??model, and when mastering the concept of object level, the AI ??model will learn how to link between multiple objects and objects. Their properties together, this can be considered an advanced stage.



1. Winnow uses computer vision to help cut waste in food processing

In experiments, this AI model shows that it can interpret new scenes and concepts that are almost perfect, completely superior to other advanced AI systems, while using only 5,000 images. photos and 100,000 questions

(compared to about 70,000 images and 700,000 questions of common AI models). In the future, the researchers' main work will be to improve the performance of the AI model in understanding real-world photographs, then gradually moving toward the object of video and robot manipulation.

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