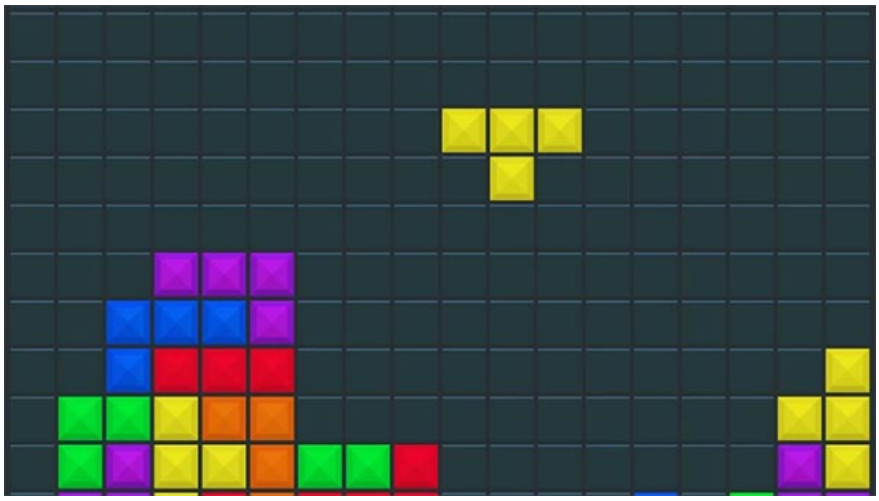
Researchers invented a method that allows playing a puzzle game through brain waves

This interesting gaming interface is named BrainNet.

A team of scientists from Washington University and Carnegie Mellon University have successfully developed a method that allows many people to participate in Tetris (legendary 'puzzle game') without sports. Manual. Instead, the player controls the game blocks through thinking.

Researchers, Linxing Jiang, Andrea Stocco, Darby Losey, Justin Abernethy, Chantel Prat and Rajesh Rao created this interesting gaming interface, and named BrainNet. According to the scientists, this is one of the first non-invasive direct brain interaction interfaces on the world of many people involved, helping to solve the problem of cooperation in titles. Games or tasks require fast decision-making capabilities of many different individuals. Basically, BrainNet allows connecting the brain signals of 3 individuals to sit in separate rooms and thereby help them work together, make decisions for a specific problem in the school. This match is playing puzzle game.

1. Insert the photon into the empty space inside the diamond

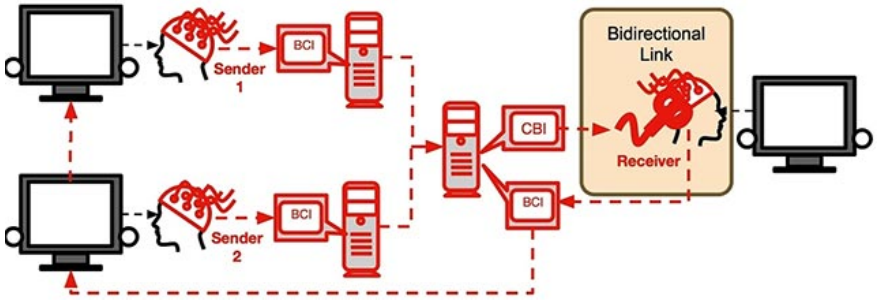


Classic Tetris puzzle game

To prove the effectiveness of BrainNet interface, the research team gave volunteers to participate in the classic Tetris puzzle game. If you do not know, for this game, there will be 7 types of bricks: I (vertical), J, L, O (square), S, T, Z. In which each block is made up of 4 Small squares lined up together. We can treat those bricks as different sized rectangles. The player's task is to move the falling blocks slowly down to fill all the spaces below. Any place that has been blocked does not move to that location. The player places the blocks so that the

block fills a horizontal row to score points, then the horizontal row will disappear.

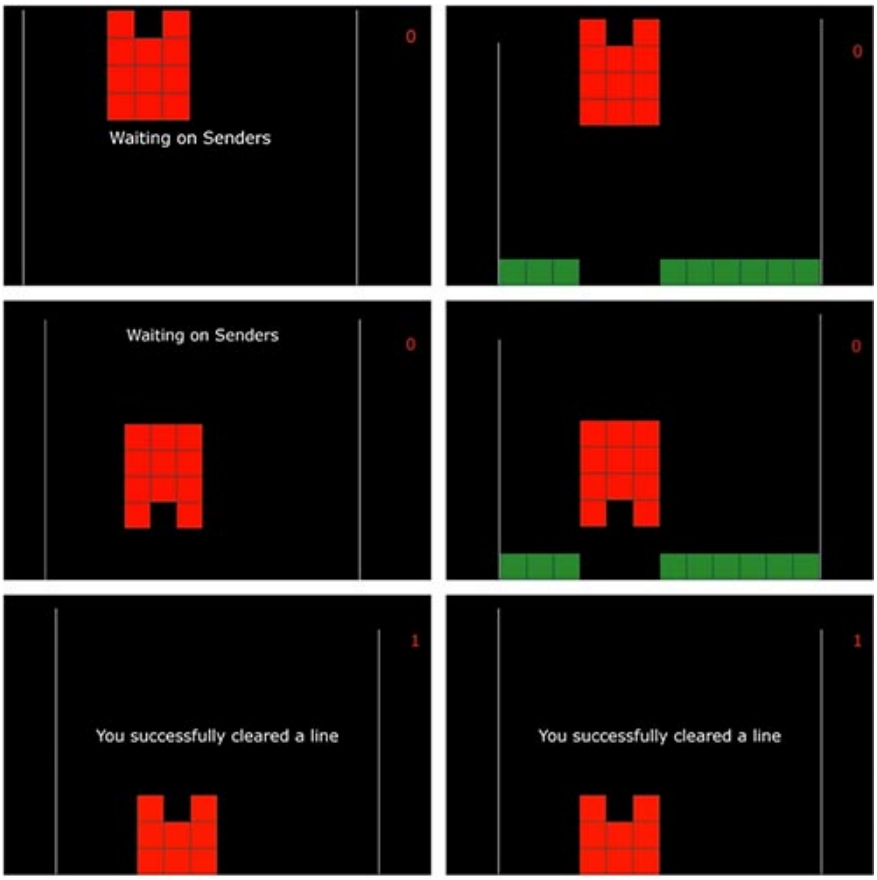
1. The Pentagon successfully developed a laser that identifies the object through the heartbeat



BrainNet experimental diagram

In this special version, all 3 players will work together to conquer the game. They are divided into groups of 2 'senders' (senders) and 1 'receivers' (receivers). 'Recipients' are the only players who can really control how the bricks fall, however they will not be able to see the bottom of the screen to indicate how the bricks will need to be rotated and flipped. . Meanwhile, 'sender' can see the bottom part of the screen, but cannot control how the bricks fall. Thus, the sender is responsible for observing each block and then answering the question of how to rotate and flip the shape.

1. Manufacturing electric cables from plastic waste - The great plan for the situation of plastic waste pollution in the world today



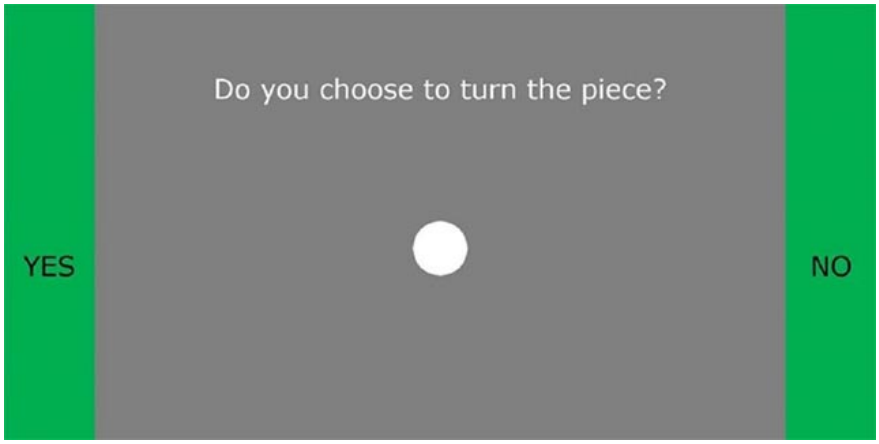
How to conduct testing

In fact, people are completely incapable of 'inheriting thought', ie, transmitting thoughts from one person to another directly to each other through the brain, which is the reason that motivates researchers. create this brain wave-based communication model

Back to the test. The sender will be provided with 2 options of 'yes' and 'no' right on the screen, and will be required to really focus to choose the right answer. The options on the screen will vibrate with light at many different frequencies. This allows an EEG headset device to clearly identify the answer the sender is focusing on by measuring their brain response.

After that, the system will transmit the information obtained through the internet connection to a device that can flash light in the recipient's eyes, indicating which answer has been selected. Then the recipient chooses a final answer by focusing on the 'yes' or 'no' options similar to the way the sender did.

1. Smart light model can transfer internet data through light at speeds up to 250Mbps



Participants will have to choose 'yes' or 'no'

Next, the researchers intervened a bit in the experiment by reversing one of the sender's answers to see if the recipient caught up with the change and actually realized that 1 in 2 people sent has misunderstood the signal. Scientists believe that like many social networking sites, BrainNet allows recipients to learn to trust the sender by determining which information from which sender is more reliable. In this case it is only based on information that is transmitted directly to their brain.

This research has opened up an opportunity to apply extremely rich in practical use. Researchers believe that BrainNet can fully scale up to create a global network of brainwaves. This can lead to cooperation and the ability to interact almost without barriers between people and people, like a 'brain-only social network'.

1. For the first time in history, scientists successfully connected the human brain to the Internet

In addition, the research team also hypothesized that people could use this kind of interface to learn how to filter bad information that affects the morale caused by negative agents - possibly by broadcasting Develop an instinctive method to find out which information is not suitable for yourself.