

Human Computer Detection Test

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Since **Turing**'s time, AI has evolved and perhaps nowadays it is the most explosive word in science and specially in computer science.

The goal of AI is to simulate human intelligence, and to build machines that have intelligence. The achievements of AI in its short history is great. About thirty or 40 years after AI research, we have built computers and systems that could reason, and understand images and speech. They even have something like creativity. They play with our children and act like their friends.

However, these achievements are only a small part of the full potential of AI. There will be greater and more advanced achievements in the near future.

The development of AI and its successes have caused some scientists to think of humans as complex robots. These scientists are convinced that AI systems can have common sense and consciousness and even have a model of human "**self**". In addition, they think machines can have free will too _ by providing some programs. In summary, **strong AI** proponents think that humans are complex robots and are not different from artificial ones.

About 40 years ago, **Alan Turing** suggested a test for finding and detecting intelligence in computers which is known as the "**Turing test**." Turing test states that if an expert cannot distinguish the performance of a computer from that of humans, that computer has intelligence.

Today, we have expert systems that can succeed in a Turing test only in specific and specialist fields. For example, perhaps distinguishing between a doctor and a medical diagnosis expert system may be hard. And we

are near a time that computers can succeed in "**Turing test**". But can we say that if a computer succeeds in a Turing test, it is intelligent? Then, how could we distinguish computers from humans?

I suggest a new test for detecting computers from human beings, and call it "**Human Computer Detection Test**". However, this test can also be an "**Intelligence Test**". We know that we _ at least at this time _ cannot read the contents of human minds (or memories) with physical devices such as disk drives. So, computers _ however intelligent _ could be duplicateable with physical devices, but we cannot duplicate human minds.

The base of my test is **readability** of memories. Of course, one of the most important characteristics of human minds and intelligence is its unreadable state. We know that information and inner states of everyone is owned by one's **self**. We are not able to read all information and inner states of one's self, and this is one of the fundamental bases of human "**self**" and his "**free will**" manner. If we could be able to find all inner states and information of people, human beings would have no free will, since in this case someone else could change it by reading that inner information and states.

So, human minds are not duplicateable and readable, and this is one of the most important characteristics of human intelligence. My test is based on that. Finally, "**Human-Computer Detection Test**" is as follows:

If an expert could be able to duplicate the whole memory of a system, that system is not human and does not have intelligence. □