

Can Machines Think? Revisited

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Abstract:

The question whether a machine can think has a special place in computer science and modern philosophy. It has avoided the clear answer as no one know what it means to 'Think'. We all experience it though. Alan Turing developed one possible approach by not answering the question directly but by comparing the actions taken by machine and a human under same circumstances(The Turing Test). However, like any other approach, Turing test is not an absolute measure of intelligence of a system.

The purpose this article is simple, to approach the question directly, by giving some arguments, deduced in no way other than pure guessing. The effectiveness of these arguments can only be measured by applying them, questioning them and modifying them.

Please note, Arguments are intended to define certain terms for machines, not for humans.

Arguments:

Argument1: "A system is said to be thinking if its inbuilt functions produce results which are not pre-programmed in it."

Argument2: "A system is said to be conscious if it can control what to think."

Thinking and intelligence are not considered to be the same things in this article. To differentiate both, the meaning of intelligence of a system is argued separately.

Argument3: "A system which is conscious is said to be intelligent if it can think, communicate, learn and evolve."

Where words 'Think' and 'Conscious' carry the meaning as argued above. Words 'Communicate', 'Learn' and 'Evolve' carry their usual meaning.

Today many systems exist specialising in one or the other. Application of these arguments are left as an excercise for the reader.

