Turing On Intelligence Essay, Research Paper

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Can computers ever be intelligent? Hollywood would like to think so. Ever since the

early 1960s, free thinking machines have entered the mainstream of Science-Fiction

films, from the evil “Hal” from 2001: A Space Odyssey to the elegant “Data” in Star T

to Turing?s criterion.

In 1950, Alan Turing devised a test to determine intelligence of a digital computer in

his historic essay, Computing Machinery and Intelligence . His name for the test was

the “Imitation game,” which was later named the “Turing Test” by members of the AI

test was held on November 8, 1991 in Boston’s Computer Museum. The contest was

called the Loebner Contest, named after a business man Hugh Loebner who offered

a $100,000 dollar prize to the author of the first program to pass the full Turing test. In t

To this day, the AI community cannot agree on how it is we are intelligent. If we are

conscious, self-aware, understanding, rational beings, and we are also intelligent, are

we intelligent because we are conscious, self-aware, and rational, or are these

achine?s outward behavior is indistinguishable from the intellectual behavior of a

human, then the machine is intelligent. Turing implies that what is happening within

the computer is irrelevant to the question of intelligence. This definition omits the The

definition of intelligence Turing proposed almost fifty years ago still remains a valid

one. Members of the AI community have accepted his definition as a law. Still others

refute his definition. In attempt to show that Turing?s definition of intel 1. Store

2. Executive unit,

3. Control.

Like and infant growing to adulthood constantly taking in data and storing it, the

computer can also receive and store inputs. With technology today, this storage can

be nearly infinite. The executive unit in an infant is the infant?s ability to access he

store, and dictates the computer?s behavior.

It is clear that although there exist significant parallels between the broad functions of

a human mind and those of a computer, there seems to be a fundamental difference

between these two systems: The computer simply recalls information stored in its d

But wouldn?t that just be an application of already known discoveries applied to a

different problem? If this type of work is defined as original, then a computer can

easily produce original work by linking information in its databases together applying

n thought. The only difference there seems to be is the lack of consciousness on the

part of the computer.

I would now like to take apart the argument of consciousness Turing addressed in his

paper with a modern example. The argument from consciousness is simple: In order

to know a machine thinks, one would have to somehow find out if the machine knows

it is s with Chinese characters on them. When a native Chinese speaker who acts as

a judge inserts a phrase by means of index cards through the slot, the man must

formulate a response. But the rule book does not have translations for the characters.

Instead, Searle states that no computer program could ever understand anything as

we understand things. Programs mimic the actions of the English speaker, they follow

rules to manipulate meaningless symbols. Although the output of the computer is

meaningful to u become the machine and experience the consciousness it is

experiencing.

The Turing test still remains the most accurate means of measuring intelligence. It is

clear that computers “think” differently than humans. Philosophers like John Searle

support the claim that computers will be able to think consciously, although not i

References:

Epstein, Robert. The Quest for the Thinking Computer. AI Magazine, pages

80–95, 1992.

Garner, Robby. The Idea of FRED, ALMA, Issue 1, January 18, 1996

Gribbin, John. In Search of Schroedinger?s Cat. New York. 1984. p163.

Turing, A.M., 1950. Computing Machinery and Intelligence, Mind 59: 433-460.

Reprinted in: Haugeland, John. Mind Design II. 1997, 29-56

Plato, Meno. Indianapolis, Indiana. 1949. p44.

Searle, John. Minds, Brains and Programs. Behavior and Brain Sciences

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