600.435 Artificial Intelligence

Homework 1

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Nowadays, artificial intelligence can mimic doing some human tasks very well such as driving a car and playing chess. But there are still many limitations on artificial intelligence. For example, when you interact with Siri, Apple’s digital intelligent personal assistant, you can find it has a lot of space for improvement. Although Siri is getting improved over time, so far you still need to use some key words and sentence patterns to interact with it. The ultimate goal for scientists who work on artificial intelligence might be to make artificial intelligence more like a “human” intelligence, which means that the artificial intelligence can really “think” like a human, not only follow some predefined rules or patterns. However, creating a real artificial intelligence might not be achievable within few years. On the other hand, there is another concept of having a real artificial intelligence by “copying” human intelligence from human brain. Instead of creating a real artificial intelligence, scientists also study “mind transfer” [1] (or called “upload”, or “brain backup”). This thought originally is for human immortality researches that try to keep a copy of human’s brain on computers after the human is dead and make it works like a human’s brain, i.e. think like a human. Stephen Hawking also said “I think the brain is like a program in the mind, which is like a computer, so it's theoretically possible to copy the brain onto a computer and so provide a form of life after death.” But, if scientists can copy a human’s brain to computers, is this copy of brain a really human intelligence or just a simulation of human brain? By “simulation of human brain”, I mean that it just works follow the rules, logic, patterns copied from the human’s brain, not really can think independently (unbounded by some rules). In addition, if the copy of brain can really think independently, would it do anything that will hurt human beings?

There are two movies, “Transcendence” and “Chappie”, which adopted this kind of concept of mind transfer in their stories. In “Transcendence,” the main actor-Will-is an artificial intelligence expert and his brain was “uploaded” to computers before he was dead.

In “Chappie,”

Feeling, free will

Sense of humor (interstellar)

Is a machine that thinks like a man a man? humanoid

is it human to live in a machine after you die? Is that a real you or just an imitation?

1. the problem raised, (b) short summary of the problem for each of the works, (c) comparison of how elements of the problem are handled in the works, (d) your personal assessment of the problem, and (e) conclusion.

Reference:

[1] http://motherboard.vice.com/blog/scientists-are-convinced-mind-transfer-is-the-key-to-immortality