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Discuss About: Can Artificial Intelligence Create Another Artificial Intelligence More Intelligent Than All Artificial Intelligences?

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Abstract

Will the machine become so powerful that it begins to think to a point where it is more capable than the humans? Notice, I said capable, not powerful. No doubt computers are more powerful at giving us answers faster than human brainpower, but are they more capable? so do artificial intelligence can create another artificial intelligence more intelligent than all artificial intelligences? You may have heard that Google Brain was able to create a software that creates an AI by itself: Researchers from Google Brain were able to design software that created an AI system to take a test that measures how well software can process language. The software did better on the test than software designed by humans .But we have Little confused about Can AI create another AI? Can it create a more intelligent one? AI is able to create other AI but not smarter than itself because when creates one it's creates one that isn't narrowed to do one thing and not learning. This would mean the new AI would have access to more I information and develop more complex codes the other and for now that is stillness impossible due to the fact that AI is still narrowed down.

Keywords: Artificial Intelligence, intelligent agent, Computational Intelligence, Cognitive simulation

Introduction

Theoretical computer science developed out of logic, the theory of computation (if this is to be considered a different subject from logic), and some related areas of mathematics So theoretically minded computer scientists are well informed about logic even when they aren't logicians. Computer scientists in general are familiar with the idea that logic provides techniques for analyzing the inferential properties of languages, and with the distinction between a high-level logical analysis of a reasoning problem and its implementations. Logic, for instance, can provide a specification for a programming language by characterizing a mapping from programs to the computations that they license. A compiler that implements the language can be incomplete, or even unsound, as long as in some sense it approximates the logical specification. This makes it possible for the involvement of logic in AI applications to vary from relatively weak uses in which the logic informs the implementation process with analytic insights, to strong uses in which the implementation algorithm can be shown to be sound and complete. In some cases, a working system is inspired by ideas from logic, but acquires features that at first seem logically problematic but can later be explained by developing new ideas in logical theory.

The study problem

AI is a common topic in both science fiction and projections about the future of technology and society. The existence of an artificial intelligence that rivals human intelligence raises difficult ethical issues, and the potential power of the technology inspires both hopes and fears. So we will discuss if AI can damage our life in the future or only help us.

What distinguishes this study from previous studies?

The main unifying theme is the idea of an intelligent agent. We define AI as the study of agents that receive percepts from the environment and perform actions. Each such agent implements a function that maps percept sequences to actions, and we cover different ways to represent these functions, such as reactive agents, real-time planners, and decision-theoretic systems. We explain the role of learning as extending the reach of the designer into unknown environments, and we show how that role constrains agent design, favoring explicit knowledge representation and reasoning. We treat robotics and vision not as independently defined problems, but as occurring in the service of achieving goals. We stress the importance of the task environment in determining the appropriate agent design. Our primary aim is to convey the ideas that have emerged over the past fifty years of AI research and the past two millennia of related work. We have tried to avoid excessive formality in the presentation of these ideas while retaining precision

The study content

Can machines think? To better understand artificial intelligence, I had to ask myself several questions: what makes a person seem real? When we speak to a person, how can we tell, without looking, that it is really a person we are talking to? How can we simulate this? I contemplated these questions and realized that people go through experiences, from which they draw on their entire life. Perhaps a truly artificial being must evolve and learn. On the other hand, perhaps we can give an artificial being all of the memories and thoughts that it needs. It seems highly implausible that we can reduce human thoughts down to a set of computer algorithms that all can duplicate with ease. The following essay will not only give the reader a better grasp of artificial intelligence, but also will attempt to deal with the plausibility and implications of a truly artificial being(Mijwil, 2015).

1.0 Is there room for AI?

Before we actually implement AI in a real life application, we have to ask ourselves if there is room for AI. Do we really want machines doing all of our jobs? If machines really do all of the jobs that people used to do, what will people do? Do we really have a need for robots? (Humphrys) Darwin believed that there were certain niches, and that all species competed for placement in these niches if one species could fill a niche better and easier than another species, the other species would dominate, and eventually one species would die out. If we were to create real thinking robots, would they not exist in the same niche as us? Would they compete for the same resources? Perhaps the creation of artificially intelligent robots would be our undoing. Perhaps there isn't actually room for an artificial creature(Korb & Nicholson, 2011). If robots were to become intelligent and form their own society, their values would be much different than ours. If one examines our society, they will notice that we deal with four different causes or death: war, disease, famine and pestilence. A machine, on the other hand, could theoretically live forever their bodies always being updated to the latest discovered technologies. They would not place the same value on life as us, as they can be simply reconstructed. If robots are allowed to roam freely, they could end up as our rulers(Brooks, 1986).

2.0 Free will?

Can we allow computers to have free will? If they do have free will, what kinds of things will they do? They may not follow the same rules that we do, and they could wreak havoc among the population. In fact, what if we gave them free will, and, thinking themselves superior to us, try and take us over? That would make to an interesting turn of events(Editor, n.d.). However AI driven robots might be restricted in the fact that they don't have free will they might accomplish less because of the fact that they would be so restricted(Ashraf, n.d.). There are many

negatives and positives, and we would have to deal with them all before we could come to a decision. (Humphrys) When we examine free will, we naturally look back at the Three Laws of Robotics. By implementing Asmov's ideas, we would be denying robots their rights a set of rights that we cherish so dearly. Is it proper to deny robots these same rights? Even criminals are guaranteed specific rights in the United States, yet we would be unwilling to grant these rights to robots robots whose logic should prevent them from doing any harm? Is there some flaw in the way humans see "human" rights? There is no doubt that when the technologies come to the point that we can create an artificial creature, there will be great speculation and debate on this subject – enough argument to prevent the actual creation of such a creature(Makridakis, 2017).

3.0 The future uses of AI

For AI to become a reality, we have to first recognize its uses. What, exactly, can we use an AI driven computer for? Quite simply, we could, if we wanted, make them into our slaves and never have to do any work again. They could take the place of humans in hazardous jobs, making the world a safer place. But is it really morally correct to make an intelligence race our slaves? Perhaps using slaves could free ourselves to do more important things? These are just a few of the questions we have to consider for future uses. in the future artificial intelligence will appear everywhere, from the menial tasks of recording a tv program on your VCR to piloting the latest airplane. It is safe to say that there will be many implementations of AI that do not require creating a robot to use. These artificial intelligence devices will greatly simplify every day life, and since these devices operate on a simple level, we will not have to deal with the life vs. AI debate(Lieto & Cruciani, 2013).

4.0 Human society and acceptance of AI driven computers

We have to ask ourselves if human society would accept AI driven computers. After all, they would probably compete with us in our daily lives, and

could get in our way. Humans also hate change, and there would be those opposed to the introduction of these new machines. Chances are they would do little harm, but could our own human prejudices prevent these species from thriving? The introduction of AI driven computers would be like finding new intelligent life they would be radically different from us, think in a very different way, yet be conscious. Needless to say, it would be very strange. Chances are that if we created an artificial creature, the creature, no matter how smart or intelligent, would be thought of subordinate to a normal human. They would never be accepted as equal, as "people are very closed minded" (Humphrys), thus they would always be charged with doing the "dirty work" so to speak. They would be treat simply as a valuable piece of hardware, something that could be replaced. One could even consider it cruel to bring an innocent new creature to life in a world that is ruled by discrimination and hatred of those who are different. This also leads us to the question will artificially intelligent creatures become our slaves or masters?(Simari, Rahwan, & School of Informatics University of Edinburgh Edinburgh EH8 9AB, n.d.).

5.0 AI computers slaves or masters?

If we gave life to an artificial creature, we would most likely want them as our slaves not as our masters. But would they want to remain our slaves? There is no doubt that these artificial creates would be more or less superior to us: they could compute math at amazing speeds as well as have increased neural activity. Perhaps, if they thought they were superior enough, they might try and take us over them become the masters, which they justify because they believe themselves superior to us. We would have to deal with these facts before creating an artificial being. However, if we treated artificial creatures as slaves, that would violate our current beliefs about "human rights", the very term describes a "homo−sapiens only

club".("Star Trek VI") It also seems that there is no way that a computer can every be on par(SHARMA, 2013).

The results of the study

In 1950, Alan Turing proposed a general procedure to test the intelligence of an agent now known as the Turing test. This procedure allows almost all the major problems of artificial intelligence to be tested. However, it is a very difficult challenge and at present all agents fail. Artificial intelligence can also be evaluated on specific problems such as small problems in chemistry, hand-writing recognition and game-playing. Such tests have been termed subject matter expert Turing tests. Smaller problems provide more achievable goals and there are an ever-increasing number of positve results.

The broad classes of outcome for an AI test are:-

1- Optimal: it is not possible to perform better .

2- Strong super-human: performs better than all humans.

3- Super-human: performs better than most humans.

4- Sub-human: performs worse than most humans.

For example, performance at draughts is optimal, performance at chess is super-human and nearing strong super-human, and performance at many everyday tasks performed by humans is sub-human. A quite different approach measures machine intelligence through tests which are developed from mathematical definitions of intelligence. Examples of these kinds of tests start in the late nineties devising intelligence tests using notions from Kolmogorov Complexity and data compression. Two major advantages of mathematical definitions are their applicability to nonhuman intelligences and their absence of a requirement for human testers.

The suggestions

Intelligent agents must be able to set goals and achieve them. They need a way to visualize the future (they must have a representation of the state of the world and be able to make predictions about how their actions will change it) and be able to make choices that maximize the utility (or "value") of the available choices. In some planning problems, the agent can assume that it is the only thing acting on the world and it can be certain what the consequences of its actions may be. However, if this is not true, it must periodically check if the world matches its predictions and it must change its plan as this becomes necessary, requiring the agent to reason under uncertainty. Multi-agent planning uses the cooperation and competition of many agents to achieve a given goal. Emergent behavior such as this is used by evolutionary algorithms and swarm intelligence. Machine learning has been central to AI research from the beginning. Unsupervised learning is the ability to find patterns in a stream of input. Supervisd learning includes both classification (be able to determine what category something belongs in, after seeing a number of examples of things from several categories) and regression (given a set of numerical input/output examples, discover a continuous function that would generate the outputs from the inputs). In reinforcement learning the agent is rewarded for good responses and punished for bad ones. These can be analyzed in terms of decision theory, using concepts like utility. The mathematical analysis of machine learning algorithms and their performance is a branch of theoretical computer science known as computational learning theory.

The conclusion

Over the next four decades, despite many stumbling blocks, AI grown from a dozen researchers, to thousands of engineers and specialists; and from programs capable of playing checkers, to systems designed to diagnose disease. As we progress in development of artificial intelligence, other theories are available, th addition to building on what we can do with AI.

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