Artificial Intelligence: Its purpose

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Abstract

Artificial Intelligence is getting more atention as the fields of working with it speed up. More aplications cames along as its potential is still unfolding in the initial stage of further development. Therefore, a lot of questions arise at the same time the implications of Artificially intelligence are in unknown territory. Thus, this article explores some issues close to what may be considered the fundaments of AI. Which is its purpose?. its limitations, Branch and aplications, different kind of AI models, its scope and implications. A preliminary conclusión could be that AI has strenght and weakness, with the later as the one to get more intense scrutiny.

1. The concept and limitations of AI

The concept of Artificial intelligence is not away from controversy. While as a discipline, there are different starting point either in 1947 (Turing), (leading years later to Jack Good(1965) to go deeper into the compuer abilities), or 1956, (Mc Carthy and others), there is also a wide range of branchs and aplications widely known since the late 2000 – and early 2010.

The fact of the matter is that although its potential is high, it has become clear for some time its limitations as a tool concerning what it is able to do. Artificial intelligence, does what the expert in charge understand about the field relevant for AI. Besides it does not say anything by itself about the reasons to justify either a prediction or outcome. Thus, the AI`s constraint deals with human limitations for programing abilities, such as it gets limited to a single purpose, but at the same time with unlimited potential for critical thinking as an input for learning further about the current status. However, it may also be the case that AI programing is doing by AI itself. This is the inflextion point about it. When human loss control of AI, which is when the risky side of AI arises. Piasecki. Wulf & Miron (2019).

Moreover, the concept itself has its flaws: the notion of "Artificial" make a call for something out of reality, therefore as an alternative world with its own rules, codes, policies and framework, like a prototype of the real world but without the mistakes and endowed with superlative efficiency. The other concept, deals with intelligence. Gardner long ago (1987), proposed that there are at least seven types of intelligence. Besides there has been new development about additional sources of intelligence dealing with individual social relationships Goleman (1998). Which one represent AI?. In any case it refers to a small fraction of the whole set of human intelligence.

2. The foundation and XAI models

However, it turned out that the new models known as the "foundation models", can be reassigned to different problems throughout a fine tuning process. Actually 80% of AI research, is focused on these models, making of AI more like a general purpose technologies model (GPT), with effect on long term productiviy growth. Key attributes of these GPT models were fast improvement in the core technology, broader applicability across sectors and innovations in associated products, services and business practices. Microsoft, Tesla, Meta & Alphabet are working with this AI GPT model, to improve its standard of superlative quality and efficiency. The economist (2022)

An alternative setting is the one called XAI (explanatory Artificial Intelligence). Gunning (2019). This model close the weakness of traditional AI models, which lack of explanatory space which is critical for fields like medicine, finance and lawful matters.

As a research discipline, it considers that every aspect of learning, can be described so precisely that a machine can simulate it properly. (Mc Carthy, Minsky, Rochester, & Shannon, 1955). AI has also been considered as a powerful representation about what it is expected to be human. Schuman (2006). In other words, the attempts to make human behavior alike to a machine. But even in such a case the most powerful artificial intelligences as a machine learning, has a limited range of intelligence behavior, as long as they are orietated towards specific uses: to make precise predictions which is the field of data procesing rather tan reasoning about the data meaning.

3. Branch and aplications of AI

There are a variety of Branch and aplications of AI. Among the most relevant branch ; it is the kind of logical one, which is based on programs about general facts concerning a specific situation to decide what to do by inferring what actions are necessary to achieve some goals. Other branch are "Search AI" programs, "Inference" from some fact, "Planning programs", "epistemology" linked to knowledge requirement to solve problems, heuristics mode, theorem proving, literature and music, logical reasoning and perception. Holden (2021)

The aplications of AI considers "game playing", Understanding language, computer visión, carry out some task such as diagnosis but constrained to the human capital endowment to be up to the AI requirement.

4. The scope of AI implications

However, beyond all of these promising Outlook dealing with computer perfomance, and how it get close to human brain neural-network process, there is concern about AI implications at the macroeconomics level, especially the welfare status following the job losses arising from a massive aplication of AI models in a variety of operation management process across different industries. More so when there is not anything yet close to a regulatory framework to deal with the whole implications of AI for economic policies and political power, making the risk of leading to a new elitism away from the

principles of the welfare state and its regulations. Piasecki, *et. al.* (2019). Therefore, it seems that the atention is on the car design, before the steering wheel is ready to make its movement possible. Hogarth (2018).

5. What is the purpose of AI, and are we up to the challenge?

The purpose of AI arise from whom are the ones interested about it. Whether is a philosopher or a psychologist, scientist, engineer or an economist. Either one, the former deal with understanding intelligence and ourselves. Ethical questions and its implications are the primary issue to deal with: Is AI inevitable?, what is the real meaning of AI?. Scientists and engineers worry about brain and how it Works, slow (neuroscience suggest it is lazy) but very Good at some task. Their aim is to identify a specific form of computation such as it allows to construct intelligent systems. For economists the main problem deals with rationality and AI regulations: Some times is rational to act randomly (game theory), but it may also be intractable, or Decision theory (Probability +Utility). Concerning regulations AI represent a tool capable ot puting at risk the traditional welfare setting. -

Therefore, there are different versions of AI, such as acting like human (Turing test), thinking like human, thinking rationally and the laws of thought or acting rationally. Holden (2021). Thus, Artificial intelligence becomes the outcome of different disciplines, sciences and fields all of which make a step by step adding up to a new AI station development. Whether we are to the challenge or not, Will depend on our ability to stay in front of it, instead of behind.