Future trends in artificial intelligence that could pose a threat to humanity

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Abstract. The world is changing in front our eyes, due to the technological progress, and yet it is not clear in which direction this will go. The technology that lately been on everyone’s lips is artificial intelligence. This technology took almost every possible field by storm and dramatically transformed them in a positive way. However, the problem relies on its nature of improvement. The technology could provide us with the brighter future, or it could deprive. Therefore, this article will cover the basics of artificial intelligence and its common application. And mainly the possibilities it could give as in terms of positivity and negativity.

1 Introduction

The use of the word “Artificial Intelligence” in the last few years has been uncountable. This combination of two word can be herded from different areas and fields. Mass media uses catchy titles with it to attract the audience, apps and software utilizes it to further improve itself and to create wider possibility for entertainment, industries and other businesses uses it to automate the overall systems, people uses it to socialize to widen once knowledge and so on. Therefore, it is understandable that the technology is all over the places and still one of the main promising technology for the brighter future.

Artificial intelligence, due to its wider capabilities and positive impact on any implemented field, is embedded almost in any possible parts of our life. Some of it can be tangible and some of it not fusible until diving deep. This technology can be found in daily routine such as mobile phones (any modern electronic devices), TV, dishwashers, vehicles etc.

One could assume, due to its late popularity, that the technology’ integration to almost anything is a result of its novelty and capability. However, the use of algorithms in different fields has been around many decades. Its late popularity and embedment are a result of sudden swept of improvement of technological aspect from one hand and programming capabilities on the other hand that gave the technology the possibilities it can have now. The progress in not stagnant and the technology is improving exponentially, that pulled some negative attention to it.

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It is well known that technological progress can be well welcomed by one side and have great influence on humanity, but there could be other side that is capable of introducing negative effect in the presence at the moment of its application and also unexpected future harm too. Artificial intelligence might be considered one of the greatest inventions, but it is also capable of introducing enormous threat. Therefore, the article will be focused on the aspect of this technology and its direction and tendency [1, 2].

2 What is AI?

AI is an attempt to create something as similar as human’s brain that will have similar capabilities, but not less. The level of human’s brain is still unreachable for the technology. However, some of its behavior can be well ahead of its target. In some cases, it could simply be at the stage of inception. In simple words, it is a programming language (algorithm) that is invented to mimic humans’ capabilities. Due to complexity of human’ brain and in general its nature, the technology is not yet close to being intelligent. But once it exceeds, the name could proudly bear the word “intelligence”.

The scientist has distinguished two stages of technology: weak and strong. Weak means that technology is still behind the capabilities of human brain. Strong identifies that the technology reached human capabilities and can perform at the same level, but not less. However, there is one case scenario where it happens to be more ahead than its creator. This part of the technology divides people on two paths. These who still willing to accept it and rely on it actions. Secondly, to those who wants the end of the technology or at least its slow dawn [3].

3 Application Of IA

The application of this technology is endless. With each passed day, one can found that the technology utilization or embedment has occurred in a new area. This technology is so heavily used on a daily basis that most of the time its usability goes unknown. It is all over the place and occurs as it was mentioned daily in new devises, technology, methods and so on. This technology transforms any industry that is being introduced. It levels up many parts of the system in which it has been implemented. It is well recognized as one of the greatest tools that automates any par of the system with great reduction of cost, and force required. This new approach of utilization of AI can be found in the following list of great applicants: healthcare, business, education, entertainment and law. this is not the complete list of its utilization, but rather shows how significant and dramatic this technology is.

3.1 Healthcare

Healthcare is the most valuable one from the other fields that are presented here in terms of humans’ wellbeing. This field needs novel approaches and end-to-end technologies to help understand the issue that are still in the promise of solving due to the lack of necessary tools and knowledge and for the future challenges that are already experienced trough different earth changing events. Humanity faces far more severe cases of illness that old and traditional methods are not ready to handle. Therefore, new breakthroughs are in favor. Artificial intelligence is used in many areas in the healthcare, and its application is increasing as the technology improves and opens new areas to be covered for thorough analysis. The one way of technology’ used is diagnosis. It could analyze data and illustrate the correlations and interferences and other important data that can be used to more precisely diagnosis. This technology can also predict and in the early stage solve the upcoming problem. The ray of
AI technology is used in more complex issues as spread of viruses such as Covid-19 and similar cases. It is also used to make faster and easier administration processes. Could it diagnose wrong illness and who will be deciding whether to implement the results or dismiss. This raises some serious questions that need to be addressed. Of course, there are a lot of other areas that can be covered on behalf of AI usage, but the main aspects are outlined as others can be derivative [4].

3.2 Business

This paragraph could go first due to its direct involvement on AI development and improvement. This sector filled with different tools that are directly related to artificial intelligence. These tools are all over the place. First and the most dubious action that participates in this field is data collection. Data in modern time is directly connected to the wellness, and therefore it can be compared to gold and oil. AI used to classify the data and for the extraction of information that could potentially convert to money.

There are so many AI related apps, bots and sites that make almost all the processes of business. AI powered tools are used throughout all the steps, starting from planning and ending at execution. These tools are so powerful that they are preferred over the people. Of course, this leads to some issues such as flushing out of professions, which is directly connected to unemployment rise. Nonetheless, technology involves and companies and other industries' adoption rate only goes up, meaning more and more jobs are taken by the AI powered tools [5, 6].

3.3 Education

This field’ adaption of the technology is behind any others listed in this work. However, these tools that are enriched with the AI are well suited for the studying purposes. Personalized learning is one of the positive side of outbreaks such as ChatGPT and similar tools. These tools are so well suited for the individuals that struggle for grasping and understanding the provided information in schools and in other educational institutions. It seems that students adapt to the new technologies before their institutions and can take more advantages from them than from old approaches. However, due to the regulation issues in AI tools, it is advised that the parental control or some measurement needs to be taken [7, 8].

3.4 Entertainment

In the few years, the technology gained much popularity due to its usage in entertainment fields. Lately, many apps occurred with the embedded AI that shows limitless potential. There are apps that can generate text, audio, images, videos and other type of materials in a second from provided prompts. The technology can imitate different styles, which makes it so popular at the moment. This type of Ai usage is fraught with dire consequences. Hyper legalistic information can be generated in a second that could mislead a person or masses. Lately there have been many cases that use AI to cheat for money or for mental abuse [8, 9, 10].

3.5 Law

One could not imagine that one day AI will be working spine to spine with the human in law. Technology is applied in different areas in the law. For example, AI used to analysis big data that humans are struggling to scope in a short period of time. Classification and finding
correlations and other prompted requests that are important for the seeker. Technology can receive and answer some questions and predict for individuals how the outcome will look like. There are many examples that can be covered to illustrate how powerful and capable this tool is. However, the main focus of the work is to outline the uncertainties that this technology provides and will provide in the future [10]

4 AI’ Tendancy and Repulsion

By observing the fields of its scope, one could understand that it permeated essential parts of our life. Therefore, it is not something that can be easily removed or pulled out if things go wrong. It is in human nature to doubt and question everything new. It is the first rule to survive by distancing from something new and to study it from the corner. In reality, this technology is new in terms of it capabilities, which repulses people. The other thing that gives trills is how fast it moves toward progress and how AI concurring new areas. This section will be devoted to closely examining its tendencies and perception [11, 12].

4.1 AI as a threat

The first and most obvious reason that this technology accused is its possibility to take over. Most of the people are afraid that this technology will be the one that truly will exceed the knowledge and capabilities to the level where humans will be no more needed in the earth or any other living things. Some specialized scientist in this field believe that this theory is fouls as long as there are some strains and safety mechanism and, hence, no need to worry about it. However, there are other too, that says the opposite of it. This year there was a petition signed by the leaders of larger industries and scientist to stop or slow down development of AI. it is not clear if this agreement was approved and embedded in favor to reduce the improvement of the technology. But one thing is true that more and more tools occur daily, which are powered by AI, and yet there is no clear sign that this technology is any how restricted or shutdown.

4.2 A third party

If future comes and use of AI is so tremendous and similarly its capabilities, one can say it is well under control and has some constrains to it. Even today's some AI powered tools are constrained to do some actions. Some third party or the creators of the tools are capable of controlling it and use in their favor. And here comes the danger of technology, as it will be tremendously powerful and someone or some organization will control it and use it for the undesirable deeds.

4.3 Dependence and privacy

The human's desire for the comfort and easiness of living life brings us to the dependence on the technology. We are so dependent on these devises and tools that losing them feels painful and have a psychological effect on us. These technologies are used at first to gather information of a person utilizing it and only then appears as a helpful invention. Some people care about their privacy and tries to use technologically advanced tools less in their routine life. At the moment these technologies can only classify and provide some paternal results that might indicate some behavior of people, but with the improvement over the year this technology will blur the line of privacy. Therefore, the best solution is to minimize the overall usage and dependence of the technology [13].
5 Conclusion

To conclude, the following article was trying to provide the clear view on the issue of Artificial intelligence. As it was noted in this article, the technology that we have right now is positively influencing any areas it was introduced. However, due to its nature of overtaking some aspects of human life in the future, it is a must thing to understand it in depth and to not rush with conclusions. Therefore, article was aimed to outline its advantages and disadvantages.

References

2. V. A. Gerasimov, M. G. Nuriev, D. A. Gashigullin, International Russian Automation Conference (2022)
8. S. Wang, Investigation on effect evaluation of undergraduates’ education in ideology and politics based on small sample multivariate data analysis. AISC, 1147, 397–404 (2020)
11. A. Sidhu, AI-Driven Threat Intelligence: Leveraging Machine Learning to Empower Cybersecurity Applications for Enhanced Threat Detection and Response (2023)