

Artificial Intelligence in Research

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Abstract

Artificial intelligence is advancing at an unprecedented speed, currently it has brought with it incredible achievements, but it has also led different sectors to cause dehumanization, we have really always used artificial intelligence in research since the use of scientific journals that arrived by mail, passing through the era of internet search engines, there we find search engines specifically to search for research or scientific publications and now reaching exactly artificial intelligence tools such as ChatGPT, Bing, etc. And others that allow us to classify the information from search engines according to our investigative alerts in different ways to have notes or scientific research within reach that in the future can help us understand them better and improve them. It is certain that in the next 5 years we will see more and much more advanced tools, it is important that we know how to use them and cite them in our manuscripts or scientific research, as the case may be, these artificial intelligence tools are a reality in medicine and They will be essential to improve research and achieve more objectives in order to be able to compare our research with artificial intelligence information, always maintaining ethics and being able to have better analysis and deep knowledge of its use in research or development. case warrants.

Keywords: artificial intelligence; tools; prompt; ethics; research

Introduction

Artificial intelligence

Galdames, IS (2023) mentions that it is a branch of Informatics and computer science that seeks to create machines and systems capable of performing tasks that require human intelligence, it can be used in many different areas, such as medical diagnosis, facial recognition, transportation, commerce, education, etc. Montalván-Vélez et al., (2024) mentions that artificial intelligence (AI) has facilitated the way we interact with the world in its different areas.

Main Objective of Artificial Intelligence

Aedo-Martín, D, (2023) mentions that one of the objectives is to develop algorithms and programs that allow machines to learn, reason, perceive, adapt and make decisions autonomously, in a similar way as human beings do. To date, there are approximately more than 9,928 artificial intelligence tools and this is increasing over time. <https://www.toolify.ai/>.

Younis, H. A et al., (2024) mention that large language models like ChatGPT show the potential of AI in generating text similar to human language through prompts and that the adaptability of ChatGPT is promising for reshaping medical practices, improve patient care, and improve

interactions between healthcare professionals, patients, and data.

Ethical Implications of Artificial Intelligence

Palma, et al., (2024) mentions that the use of AI raises many ethical issues because it involves legal and social risks and challenges that must be considered and adequately regulated, some of these risks are:

- Potential misuse of AI systems: AI systems can be used for nefarious purposes, such as data manipulation or exploitation of vulnerable populations.
- AI systems are often opaque: meaning it is difficult to understand how they arrive at their decisions.
- The potential for bias in AI systems: AI systems can be programmed with biased data sets resulting in biased decisions.
- Potential for AI systems to be used to violate human rights: AI can be used to violate human rights, such as privacy or freedom of expression.
- It is essential to consider these ethical issues when developing and using AI systems.
- It must be considered that they can cause significant damage to people and society.

Benvenuto -Vera, Á. (2023). It mentions that the implementation of Artificial Intelligence (AI) in

research raises ethical and legal challenges that must be addressed.

Prompt in AI

Gordon Graell, RD (2022) mentions the importance of using a prompt (or “input text”) instructions or instructions that are provided to a language model or a natural language processing system to request a specific response.

<https://directorioias.com/curiosidades/prompts/>.

It is important to know how to use artificial intelligence so that it performs assigned tasks well. Bibliographic Information Search Secinaro, S et al., (2021) Mentions that one of the scientific disciplines that has been most enhanced by AI is Bioinformatics. The digital tools provided by technology allowed for a quantum leap in quality in the understanding of the map of life, its functioning and characteristics, which, in turn, determined an advance in the understanding of omics sciences and in the treatment of diseases such as cancer.

There are several tools that use artificial intelligence to facilitate the search for bibliographic information. They often use natural language processing and machine learning techniques to improve the accuracy and relevance of the results.

Examples of some tools:

- Search engines
- Academic repositories
- Artificial Intelligence (AI)

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