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Artificial intelligence: The future is already here

Artificial intelligence, or AI, has become an integral part of our daily lives, revolutionizing industries such as healthcare, finance, and transportation (Çalişkan *et al*., 2022; Giansanti, 2022). This advanced technology is a result of the development of computer systems capable of performing tasks that traditionally require human intelligence. AI encompasses a wide range of technologies, including machine learning, deep learning, natural language processing, and computer vision. As computing technology continues to advance, the applications of AI are expected to become increasingly prevalent in our everyday lives (Dinu *et al*., 2023). This marks a significant intersection of various technical sciences, psychology, philosophy, and art, and has the potential to transform many aspects of human life. In today's rapidly changing world, the specificity of artificial intelligence is evident in its various computational capabilities and technologies such as machine learn-

ing, deep learning, natural language processing, and computer vision (Huo & Wang, 2022). AI's specificity lies in its ability to accurately interpret input data, learn from it, and use those learnings to complete specific tasks.

The development and intersection of deep learning and neural networks have propelled AI into society in the form of voice assistants and image recognition technology. This has made AI technology more accessible and has significantly impacted the way we interact with digital systems. Additionally, the power and efficiency of AI, especially in healthcare, have enabled early detection of sickness, disease management, prediction of critical events, and evaluation of diseases. This exemplifies AI's potential to transform critical aspects of human life by revolutionizing healthcare processes and improving patient outcomes. As such, AI has proven to be a general-purpose technology that generates value across numerous industries, with applications spanning self-driving cars, robotics, and automated content (Vătămănescu *et al*., 2023). The future holds great potential for the continued integration and advancement of AI, as it continues to evolve and influence various facets of human society.

From a conceptual standpoint, AI is a construct constantly evolving in contemporary society, becoming an omniscient theme of resonance and impact, a new field of scientific research finding its applicability and relevance in increasingly more industries and business sectors. If AI was an abstract concept over 30 years ago, difficult to understand and somewhat ambiguous due to technological developments and the increase of machine-based learning and computing capacity, artificial intelligence is now becoming the vector that competes with technological, social, cultural, and economic progress, easing human labor, facilitating societal development, and transforming the lives of us all.

AI is different today than in the past for several reasons. Firstly, the explosive growth of available data has fueled advances in machine learning algorithms, enabling AI systems to learn complex decision rules from large datasets, making them more precise and adaptable than earlier models. Secondly, increases in computational power have made it possible to run complex algorithms and process immense amounts of data in real-time. Thirdly, the development of more sophisticated AI algorithms and techniques, such as deep learning, allow AI systems to perform tasks that involve understanding natural language, recognizing patterns, and making autonomous decisions- tasks that were previously difficult for AI systems.

Lastly, the integration and application of AI have significantly broadened and diversified, enhancing its impact across industries and functions.

AI has the advantage of continuous improvement, constantly learning from its own experiences and generating new knowledge and behaviors. In addition, it can be used to some extent in decision-making and language processing (Galimova *et al*., 2019). It allows the development of causality by working towards universal intelligent machines (Tecuci, 2012; Yang & Wan, 2022).

Either aware or not, the modern consumer is confronted daily with new and innovative developments and applications based on artificial intelligence, meant to ease interactions in society, boost well-being, and facilitate access to information, knowledge, and skills. Autonomous vehicles, together with electronic and household appliances and equipment (used at home or work) that communicate with each other and with the user, along with early warning systems based on real-time image processing (Mobayo *et al*., 2021) are just a few examples based on artificial intelligence that streamline and even improve daily life. Virtual assistants, chatbots, intelligent facial recognition, and predictive systems for potentially harmful situations and even diseases are other notable examples of using artificial intelligence directly impacting human well-being (Donepudi, 2018; Prorok, 2022).

Basically, artificial intelligence has the essential role of facilitating processes and automating tasks, contributing not only to the increase of user comfort or to the diminishing of the user's physical effort in the implementation of specific tasks, but also to the user's overall improvement of quality of life. Thus, human work that previously took a lot of time can now increase in complexity and become more innovative, efficient, engaging, helpful, and creative, finally generating and enhancing the overall user experience (Dhiman, 2023).

Of course, the use of artificial intelligence in various domains (medicine, logistics, business, industry, etc.) must be achieved by respecting users' rights, be they developers, citizens, users, or other stakeholders. Contemporary society as a whole must benefit from technological advances and artificial intelligence developments, fostering its evolution. The use of artificial intelligence must be based on respect for the ethics and moral integrity of all stakeholders involved, but especially on the protection of data collected through mobile applications (Stanciu & Rindasu, 2021). Unauthorized handling, misuse, or even data theft, constitute severe violations of deontology and human privacy.

Artificial intelligence is constantly evolving, which requires users to have a proper understanding of its implications and a reconsideration of human-technology relationships. It must be used mainly to improve work, increase productivity, and facilitate task performance, not for human control or manipulation. As far as possible, human-machine interaction should be smooth and simple, based on empathy, interaction quality, and perceived psychological anthropomorphic characteristics, thus leading to the acceptance of artificial intelligence (Pelău *et al*., 2021).

Undoubtedly, artificial intelligence brings a series of intrinsic advantages and benefits, but also poses countless challenges and risks. Both users and developers of AI-driven systems must be aware of the dangers they are exposed to when pushing the boundaries when manipulating or using AI-based systems for personal and unethical purposes. Of course, the advance of society, especially on the horizon of the metaverse and quantum computing, cannot occur without advancements and the use of artificial intelligence.

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