

CAN THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE (AI) AFFECT CLIMATE RESEARCH?

The development of AI (artificial intelligence) has the potential to significantly impact climate research through the use of advanced modelling, data research and optimization techniques.

As climate-related disasters become more frequent and destructive, there is a growing demand for advanced AI technologies to help scientists better understand and mitigate the impacts of climate change. One such technology is AI, which has the potential to revolutionize and improve the way we study and respond swiftly to climate issues we face.

With its ability to analyze large amounts of data, identify patterns and correlations, AI can help better understand complex climate systems and offer more accurate predictions about future climate trends.

For example, AI can analyze satellite data to track changes in sea levels and ocean temperatures, perform calculations and make accurate climate predictions in order to prevent damage caused by global warming. It can also be used to optimize climate models and simulations, showing the impact of climate change on different regions of the world.

Moreover, AI has a great potential to identify new solutions to climate-related problems. For example, the scientists are in the process of learning how to design and create exceptionally light and extraordinary strong materials that can sustain extreme weather conditions.

AI can be applied to optimize renewable energy, also called as “Green Energy”, improving its efficiency. It offers the opportunity of developing new ways to help reduce carbon emissions and lower our carbon footprint.

Another important field of application is agriculture. AI can be used for more efficient irrigation of crops, optimal use of fertilizers and improving planting season schedule that can result in more productive harvests.

Although, one should not forget that everything costs money and human resources. AI is a very expensive tool and requires deep knowledge and talented workers to develop systems that can work efficiently. In addition, it should be simple to be used productively by people who do not work in the field of AI development.

Overall, the development of AI has the potential to significantly enhance our ability to study, research and respond to global warming. By using the power of advanced data analysis and optimization, AI can redirect resources where they are needed. AI can help us better understand the complex systems that rule our planet's climate and develop more effective strategies for mitigating the impacts of climate change. So, we need to develop and deploy artificial intelligence to meet our needs and protect the environment.

REFERENCES

1. How AI Can Help Combat Climate Change [Электронный ресурс] – Режим доступа до ресурсу: <https://hub.jhu.edu/2023/03/07/artificial-intelligence->

[combat-climate-change/](#)

2. AI Is Essential for Solving the Climate Crisis [Электронный ресурс] –
Режим доступа до ресурсу: <https://www.bcg.com/publications/2022/how-ai-can-help-climate-change>