# Article information:

The AI gambit: leveraging artificial intelligence to combat climate change—opportunities, challenges, and recommendations | AI & SOCIETY
<https://link.springer.com/article/10.1007/s00146-021-01294-x>

# Article summary:

1. AI is being used to combat climate change by improving understanding, forecasting future trends, and facilitating effective responses such as energy efficiency and policy-making.

2. The carbon footprint of AI research is a concern, as developing computation-intensive AI systems can contribute to global climate change through greenhouse gas emissions.

3. European institutions and initiatives are at the forefront of leveraging AI for climate change solutions, with projects spanning various disciplines and sectors to address the environmental crisis effectively.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article "The AI gambit: leveraging artificial intelligence to combat climate change—opportunities, challenges, and recommendations" provides a comprehensive overview of the role that artificial intelligence (AI) can play in addressing global climate change. The article highlights the opportunities presented by AI in understanding and combating climate change, as well as the challenges and ethical considerations that come with its implementation.

One potential bias in the article is the focus on the positive impact of AI in fighting climate change, without giving equal weight to potential risks and drawbacks. While the article acknowledges some ethical challenges associated with AI, such as unfair bias and discrimination, it does not delve deeply into these issues or explore potential negative consequences of relying heavily on AI technology. This one-sided reporting may give readers a skewed view of the overall impact of AI on climate change mitigation efforts.

Additionally, the article makes several unsupported claims about the effectiveness of AI in addressing climate change. For example, it states that using AI for environmental applications could boost global GDP by 3.1-4.4% and reduce greenhouse gas emissions by 1.5-4% by 2030 compared to a business-as-usual scenario. These claims are not backed up with specific evidence or studies, leaving room for skepticism about their validity.

Furthermore, there are missing points of consideration in the article regarding the environmental impact of developing computation-intensive AI systems. While it briefly touches on the carbon footprint of AI research, it does not fully explore the trade-off between GHG emissions generated by AI research and the energy efficiency gains that AI offers when applied to various tasks and industries. This lack of thorough analysis leaves a gap in understanding how AI development may contribute to overall carbon emissions.

The article also lacks exploration of potential counterarguments or alternative perspectives on using AI to combat climate change. By presenting primarily positive examples and success stories of AI initiatives in this context, it fails to provide a balanced view of both the benefits and limitations of integrating AI technology into climate change strategies.

Moreover, there is a promotional tone throughout the article towards leveraging AI for climate change solutions, without adequately addressing possible risks or downsides associated with this approach. The recommendations provided at the end of the article focus mainly on harnessing opportunities for using AI in combating climate change, rather than considering potential pitfalls or unintended consequences.

In conclusion, while "The AI gambit: leveraging artificial intelligence to combat climate change" offers valuable insights into how AI can be utilized to address global warming, it falls short in providing a balanced assessment of both the benefits and drawbacks of this approach. A more critical analysis that considers potential biases, unsupported claims, missing evidence, unexplored counterarguments, and promotional content would enhance the credibility and depth of this discussion on leveraging AI for combating climate change.

# Topics for further research:

* Environmental impact of AI development on carbon emissions
* Ethical considerations of using AI for climate change mitigation
* Trade-off between GHG emissions from AI research and energy efficiency gains
* Negative consequences of relying heavily on AI technology for climate change solutions
* Criticisms of using AI to combat climate change
* Risks and drawbacks of leveraging AI for environmental applications

# Report location:

<https://www.fullpicture.app/item/292705fc06bd7d321091da5084f2b35d>