

Will my Open Access article be used to train Artificial Intelligence? How do I protect myself?

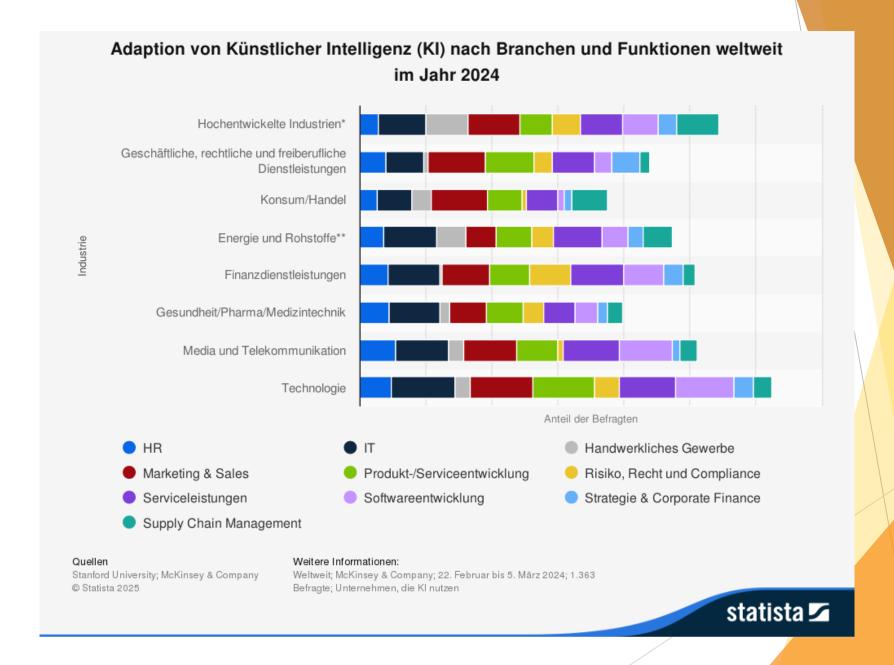
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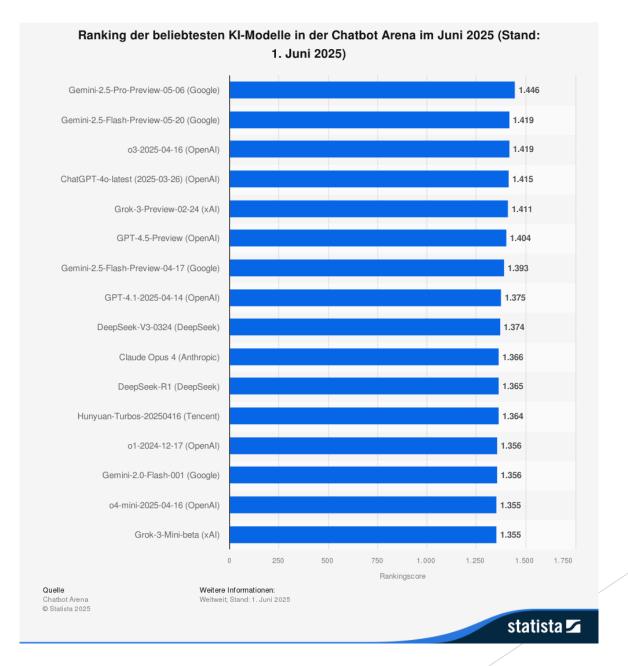


Will my Open Access article be used to train Artificial Intelligence?

The short answer: Yes!

But it doesn't have to be to your disadvantage. Here's what you need to know.





Artifical Intelligence: A short overview

- Articial intelligence (AI) "the capability of computer systems or algorithms to imitate intelligent human behavior" (Merriam-Webster Online Dictionary)
- Founded as an academic discipline in 1956,
- In recent years, ongoing rapid progress in technological development (modern deep learning techniques and large language models (LLMs))
- Generative pre-trained transformers (GPT) are LLMs that can process and produce text, image, and video material.

Training multimodal GPT:

- On large datasets that include text, images, and videos,
- by crawling the web, mining online content.

Artifical Intelligence: Challenges

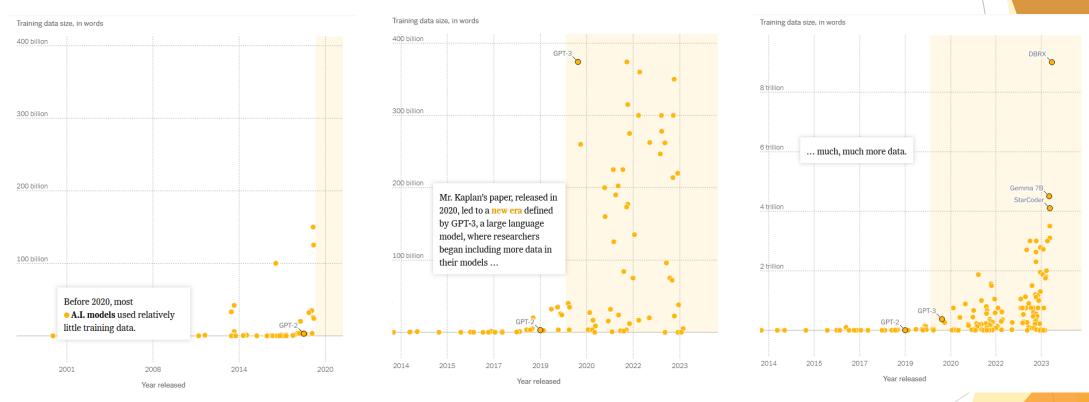
Edited texts, such as (scientific) books and journal articles, are preferred for AI training.

Research output has become a valuable resource for AI training.

Rising challenges:

- Growing need for new data to continue training AI models.
- Access restrictions by website operators.
- Legal challenges (law suits for copyright infringement).

,Scale is all you need: On size and performance in generative data models



Metz, Cade et al., How Tech Giants Cut Corners to Harvest Data for A.I., NYTimes, updated April 8, 2024, https://www.nytimes.com/2024/04/06/technology/tech-giants-harvest-data-artificial-intelligence.html. Jared Kaplan et al. (2020), https://www.nytimes.com/2024/04/06/technology/tech-giants-harvest-data-artificial-intelligence.html. Jared Kaplan et al. (2020), https://www.nytimes.com/2024/04/06/technology/tech-giants-harvest-data-artificial-intelligence.html. Jared Kaplan et al. (2020), https://www.nytimes.com/2024/04/06/technology/tech-giants-harvest-data-artificial-intelligence.html. Jared Kaplan et al. (2020) were able to prove the connection between size and performance in generative data models. This correlation is the subject of relevant research by the New York Times in 2024: The New York Times charts illustrate the exponential increase in training data sets from before 2020 up to and including 2023. There have long been bottlenecks in human-generated data, so Al companies are increasingly dependent on the use of 'synthetic', i.e. machine-generated data sets."

Open Access in Research Funding

Research assessment:

- Research funders increasingly mandate Open Access publications.
- Publishing Green Open Access (self-archiving) is encouraged.

Publishers:

- Self-archiving is often permitted by publishers.
- Observe embargo periods, article versions!

→ Find support for research funding at Ulm University's Center for Research Strategy and Support (Res.UL)



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Open Access Mandate: EU Horizon Europe

Open Science

Open science: open access to scientific publications

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110

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Do NC/ND licences protect against AI training?

No. There's a growing need for new data to continue training AI models and business practices that do so, many of which are facing legal changes.

How to use Open Access to counteract the formation of monopolies in AI:

- A certain loss of control over published content is inevitable.
- Prevent the concentration of exclusive access to scientific information without extra costly licences required by publishers.

Publishing Open Access

Standard und Best Practice

► In the spirit of Ulm University's <a>Open-Access-Resolution

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Takeaways

- 1. Apply for Open Access funding at kiz
- 2. Choose CC BY 4.0
- 3. Make use of persistent identifiers (DOI, ORCID, ROR etc.)
- 4. Inform yourself how to use AI correctly when doing research and publishing
- 5. Practice Open Science

Your Questions - Q&A

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Licenses & Green Open Access

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