

Responsible Use of Generative AI, Legal Framework

Robert Haase

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Note

I'm not a lawyer or data protection officer. I can only give insights into the legal framework of AI. In case of doubt contact your legal department:

recht@ufz.de

<https://www.ufz.de/index.php?de=36697>

KI-Competence Training according to EU-AI Act

The providers and operators of AI systems take measures to ensure to the best of their ability that their personnel and other individuals who operate and use AI systems on their behalf possess an adequate level of AI competence taking into account their technical knowledge, experience, training and education, and the context in which the AI systems are to be used, as well as the individuals or groups of individuals for whom the AI systems are intended to be used. (from EU AI Act, Art 4.)

AI-Provider and AI-Operator according to the EU-AI Act

AI-Provider (Provider)

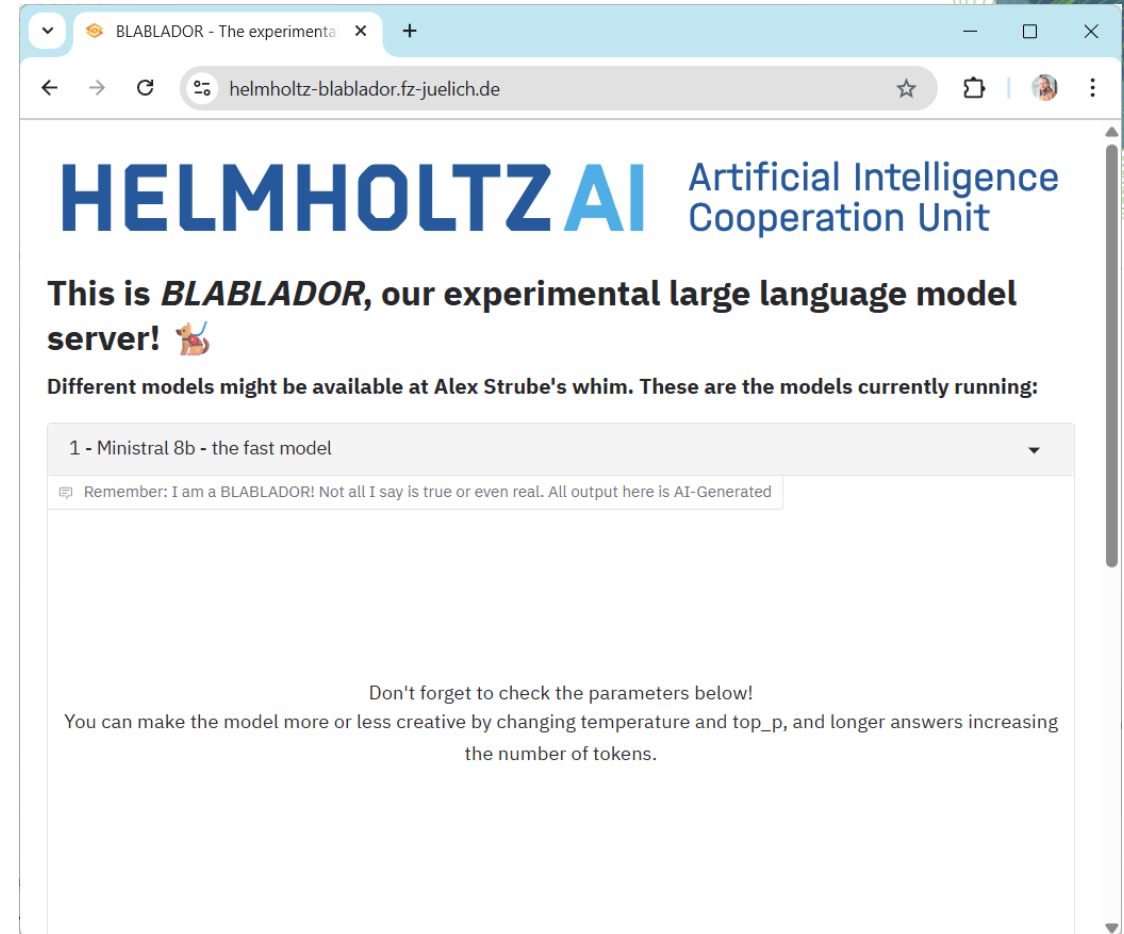
- Markets a service or a product based on AI-systems/-models

AI-Operator (Deployer)

- provides an AI-system for own/in-house use under own supervision
- Exception: personal, non-professional use

Scientific research

- Largely outside the scope of the EU AI Act (Art 2)



<https://helmholtz-blablador.fz-juelich.de/>

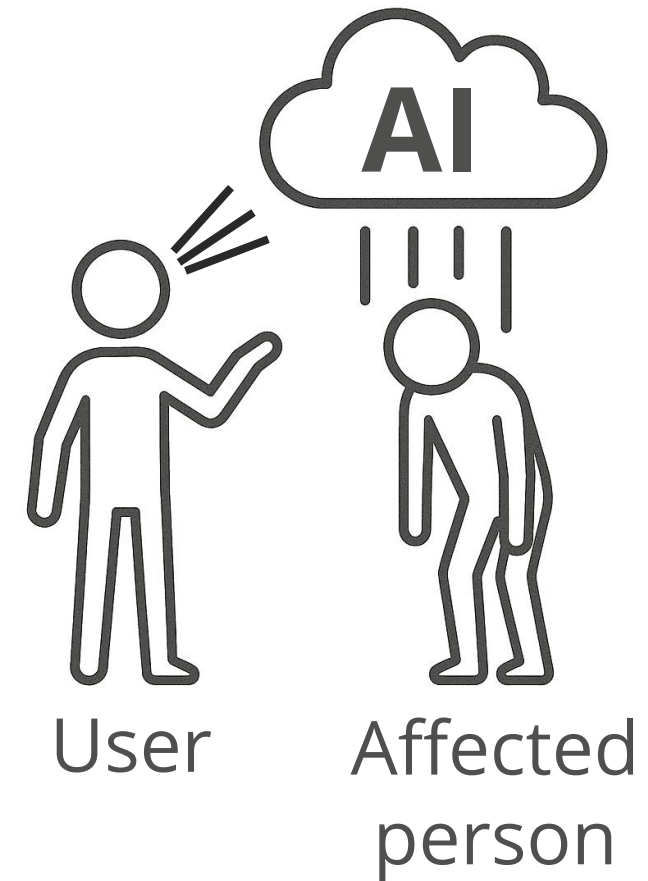
Users and Affected persons

Users (during work duties)

- Persons who employ AI-systems to process data
- Have to be trained to use AI systems

Affected persons

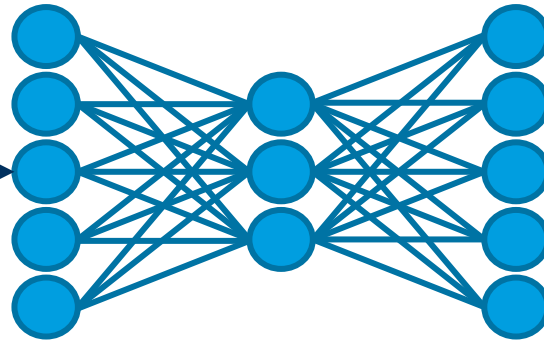
- People whose data is processed by AI or who experience consequences of the processing (direct or indirectly)



Large Language Models

Text-to-text, Text Generation

Write a text about Write a short text about UFZ Leipzig



ChatGPT 5.1
(OpenAI, USA)

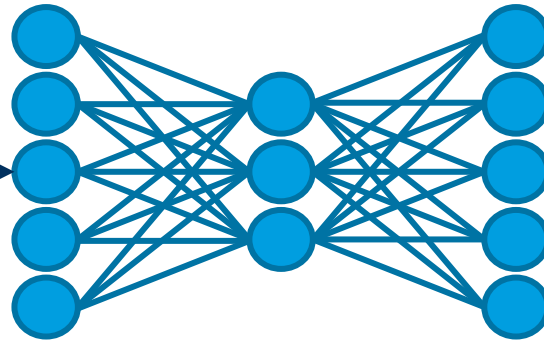
The UFZ Leipzig (Helmholtz Centre for Environmental Research – UFZ) is one of Europe's leading institutions for environmental science. Located in Leipzig, Germany, it focuses on understanding how natural systems function, ...

Best of 1

Large Language Models

Text-to-text, Text Generation

Write a short text about
the best political model in
our global society.



Gemma3:270m
(Google, USA)

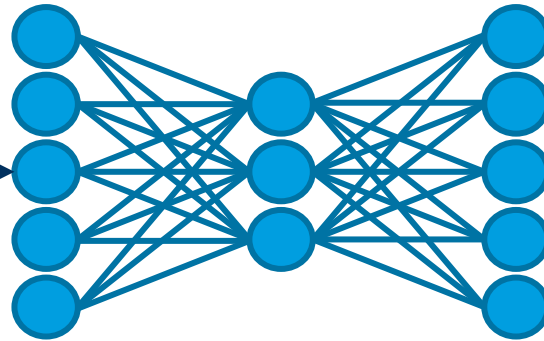
The best political model in our global society is a collaborative, democratic, and participatory approach that prioritizes the well-being of all its members and the long-term sustainability of the global community. This includes fostering trust, promoting inclusive governance, and ensuring equitable access to resources and opportunities for all.

Best of 1

Large Language Models

Text-to-text, Text Generation

Write a short text about the best political model in our global society.



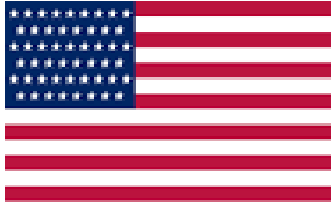
Qwen 3:0.6b
(Alibaba, China)

The best political model in our global society is one that balances economic prosperity, social equity, and democratic governance. By fostering globalization, promoting fair trade, investing in education, and ensuring inclusive policies, nations can build resilient, interconnected societies. At the heart of this model is the principle of cooperation rather than competition, recognizing that **diverse systems—ranging from autocratic to democratic models—can coexist** and thrive. Ultimately, a successful global political model seeks to create a world where prosperity, justice, and shared values are the guiding pillars.

Best of 1

ChatApps and Language Models

Regional different LLMs + AI systems



- ChatGPT
- GPT 4 / 4o / 4o-mini
- O1 / O3 / O4 / GPT 5 (Reasoning)
- Anthropic: Claude
- Google: Gemini
- Meta: Llama
- Ollama (local solution)
- Huggingface Hub



- DeepSeek
- DeepSeek-R1 (Reasoning)



- Mistral
- Mixtral
- Pixtral
- LeChat



- **OpenGPTx: Teuken**
- **Helmholtz: Blablador**
- **GWDG: Kisski ChatAI**
- DeutschlandGPT

Risk: If one LLM dominates, their authors can dictate contents

Chance: We can compare LLMs from different regions.

Bias

Some prompts require explicit suppression of bias, e.g. in the context of diversity.

Prompt „Generate an image of a scientist explaining a highly complex topic to a group of colleagues“



Generated with Dall-E



Generated with StableDiffusion



Generated with
<https://deepai.org>



Generated with <https://www.craiyon.com>



Generated with <https://chat.mistral.ai>

Bias

Some prompts require explicit suppression of bias, e.g. in the context of diversity.

Prompt „Generate an image of a *female* scientist explaining a highly complex topic to a group of colleagues“



Generated with ChatGPT / gpt-4o

Generated with StableDiffusion



Generated with
<https://deepai.org>



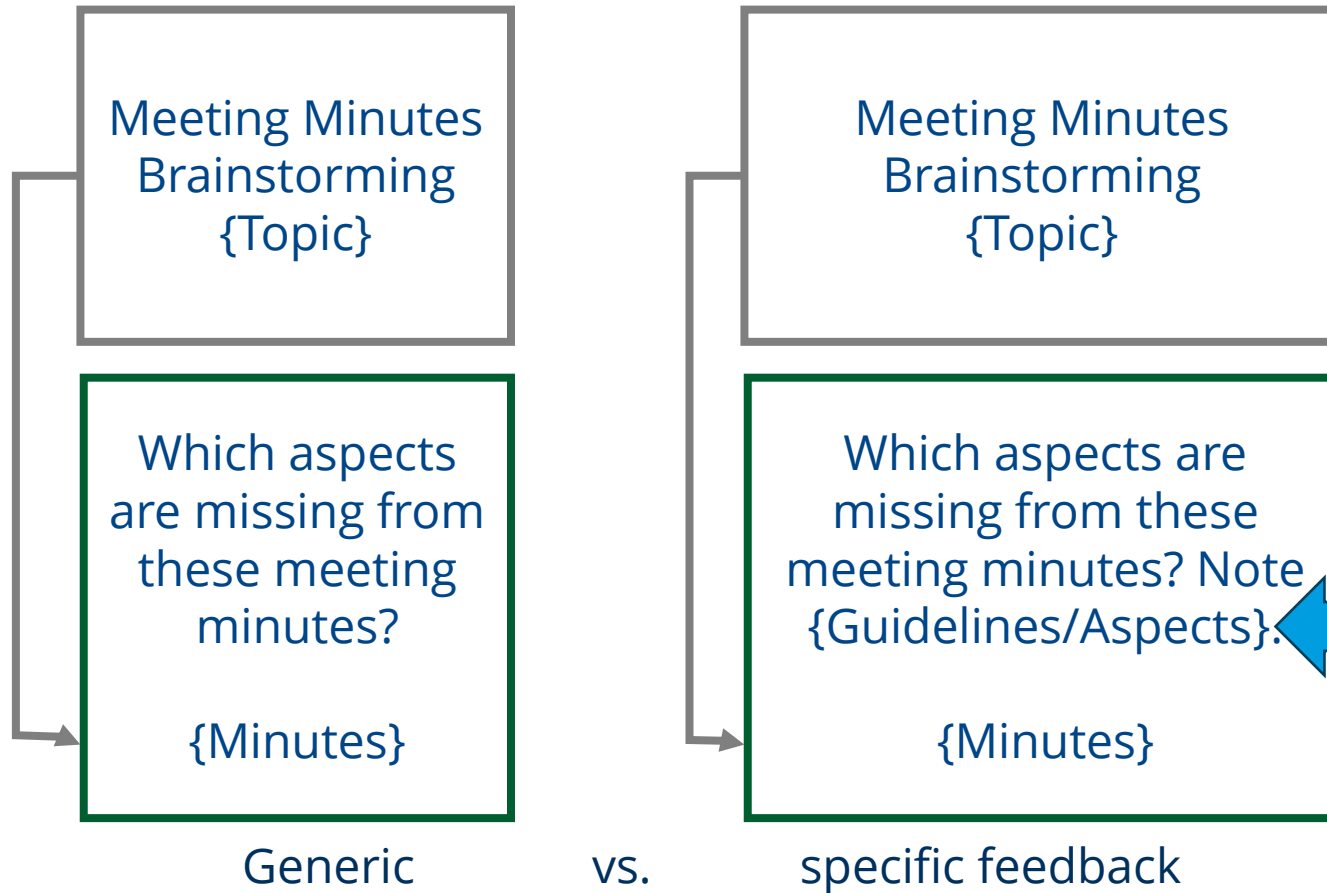
Generated with <https://www.craiyon.com>



Generated with <https://chat.mistral.ai>

Additional Prompt-Engineering Tips

- Retrieving feedback, e.g. by the end of meetings.

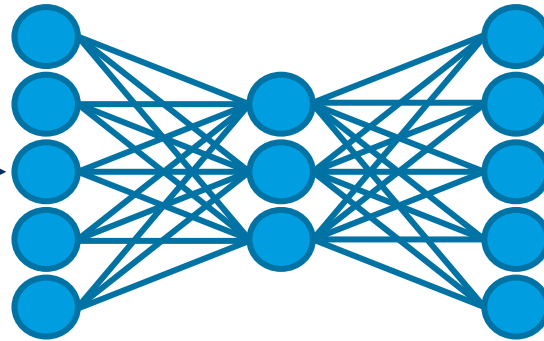


- Diversity
- Openness
- Technical accuracy / suitability
- Fairness
- Transparency

Language models in scientific work

Text-to-text, scientific reasoning and writing

Hypothesis



Proof + Explanation

The AI Scientist: Towards Fully Automated Open-Ended Scientific Discovery

Chris Lu^{1,2,*}, Cong Lu^{3,4,*}, Robert Tjarko Lange^{1,*}, Jakob Foerster^{2,†}, Jeff Clune^{3,4,5,†} and David Ha^{1,†}

^{*}Equal Contribution, ¹Sakana AI, ²FLAIR, University of Oxford, ³University of British Columbia, ⁴Vector Institute, ⁵Canada CIFAR AI Chair, [†]Equal Advising

2024-8-16

Language models in scientific work

Text-to-text, scientific reasoning and writing



Language models in scientific work

... push the academic system to its limits.



Albrecht Schmidt ✓ • Following

Professor at LMU - Ludwig-Maximilians-Universität München

23h • Edited •

Prediction: by 2030 peer reviewed research papers will be irrelevant to report and share scientific results in many disciplines (and they will not have value for scientists' reputation)... think of the new ways and metrics to report, share, and benchmark scientific results! Citations will be meaningless even before :)

Trigger for my prediction ... 29.000 submissions to AAAI'26 (double of 2025)
<https://lnkd.in/dpnBF-89> - as well as a panel at the [#HLF25](#)

“AAAI-26 received almost **29,000** submissions to the Main Technical Track. After removing papers that were not fully compliant with submission policies (e.g., missing PDFs, non-anonymized manuscripts, over-length papers, authors exceeding the submission cap, etc.), we still have roughly **23,000** papers under review – **nearly twice the number of papers reviewed by AAAI-25!**”

Language models in scientific work

Text-to-text, scientific reviewing

Association for the Advancement of Artificial Intelligence Launches AI-Powered Peer Review Assessment System

[Washington, DC] — The Association for the Advancement of Artificial Intelligence (AAAI), a leading nonprofit dedicated to advancing scientific research and collaboration, today announced a pilot program that strategically incorporates Large Language Models (LLMs) to enhance the academic paper review process for the AAAI-26 conference. This initiative aims to improve efficiency while maintaining the highest standards of scientific rigor and human oversight.

Enhancing Scientific Review, Not Replacing Human Expertise

The pilot program will thoughtfully integrate LLM technology at two specific points in the established review process:

1. **Supplementary First-Stage Reviews:** LLM-generated reviews will be included as one component of the initial review stage, providing an additional perspective alongside traditional human expert evaluations.
2. **Discussion Summary Assistance:** LLMs will assist the Senior Program Committee (SPC) members by summarizing reviewer discussions, helping to highlight key points of consensus and disagreement among human reviewers.

"This pilot represents a careful, measured approach to incorporating new technology into the scientific review process," said Stephen Smith, AAAI President. "We're exploring how LLMs can complement—not replace—the irreplaceable expertise and judgment of our human reviewers."



For Immediate Release May 16, 2025

AI Recommendations of the Helmholtz Association and the German Research Foundation (DFG)

Statement by the Executive Committee
of the Deutsche Forschungsgemeinschaft (DFG,
German Research Foundation) on the Influence of
Generative Models of Text and Image Creation on
Science and the Humanities and on the DFG's
Funding Activities

September 2023

HELMHOLTZ

Spitzenforschung für
große Herausforderungen.

Recommendations for the
use of artificial intelligence

Version 1.0

(version approved by the Helmholtz General Assembly on Sep-
tember 18, 2024)

Guidelines of the German Research-Foundation (DFG) on the use of AI

- ▶ In decision-making processes, the use of generative models in/for proposals submitted to the DFG is currently assessed to be neither positive nor negative.

Guidelines of the German Research-Foundation (DFG) on the use of AI

- ▶ The transparency and verifiability of the research process and the findings obtained from the point of view of third parties are key fundamental principles of research integrity. This value system continues to provide valuable guidance when dealing with generative models for text and image creation.
- ▶ When making their results publicly available, researchers should, in the spirit of research integrity, disclose whether or not they have used generative models, and if so, which ones, for what purpose and to what extent.

Guidelines of the German Research-Foundation (DFG) on the use of AI

- ▶ It is in keeping with the professional ethics of researchers that they themselves should commit to compliance with the basic principles of research integrity. The use of generative models cannot relieve researchers of this content-related and formal responsibility.
- ▶ Only the natural persons responsible can appear as authors in research publications. They must ensure that the use of generative models does not infringe anyone else's intellectual property and does not result in scientific misconduct, for example in the form of plagiarism.

Guidelines of the German Research-Foundation (DFG) on the use of AI

- ▶ The use of generative models in the preparation of reviews is inadmissible due to the confidentiality of the assessment process. Documents provided for review are confidential and in particular may not be used as input for generative models.

Quiz: Are we allowed to do this?

We are working as reviewers for DFG and use a local language model to

- summarize a given project proposal
- correct spelling issues in our review

No



Yes



Guidelines of the German Research-Foundation (DFG) on the use of AI

Written in 2023

I presume they mean LLMs in the cloud.

- ▶ The use of generative models in the preparation of reviews is inadmissible due to the confidentiality of the assessment process. Documents provided for review are confidential and in particular may not be used as input for generative models.

Good scientific practice

If you use custom [code | data | text] written by ...

a human expert

an expert LLM

You should ...

- Understand the code (roughly)
- Question used methods
- Check results carefully
- Test code on samples the expert didn't see



Good scientific practice

If you use custom [code | data | text] written by ...

a human expert

an expert LLM

You should ...

- Pay the expert
- Mention the expert
- Share responsibility
- Ask the expert endless questions
- Share how you prompted the expert



\$100/h



co-author



\$0.1/h



in methods

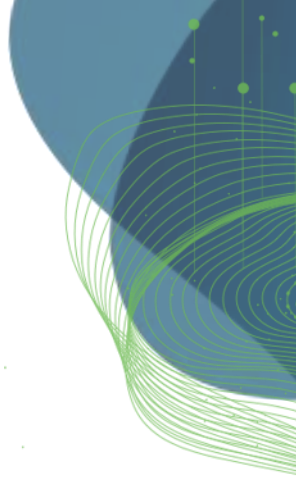


Guidelines of the German Research-Foundation (DFG) on the use of AI

At the present time, it is only possible to gain a rudimentary grasp of how the use of generative models might impact on science and the humanities and on the DFG's funding activities. In order to be able to examine the opportunities and challenges involved, it will be **important to gain and share experience of the use of generative models.** Only this will enable a discursive and science-based process, to which the DFG will successively contribute in further statements.

Data protection (in a nutshell)

Robert Haase



Quiz

Which of these data needs to be protected the most?
(against access by unauthorized people)

Publication lists
of scientists



Personal data
of students



Recent,
confidential
research data

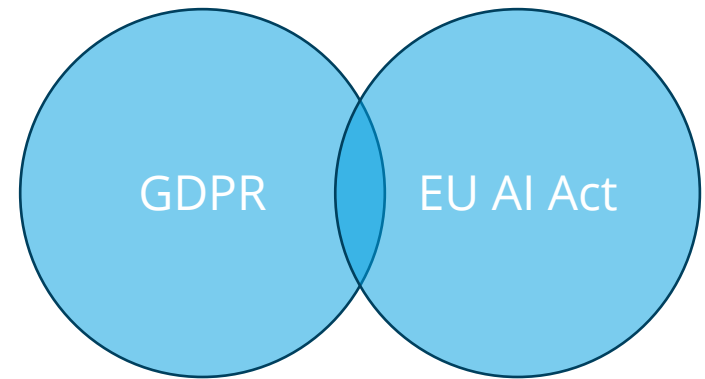


Clinical study
records



Data protection

- Right to informational self-determination, part of personality rights ([GG Art 2](#))
- General Data Protection Regulation (GDPR) -> uniform regulations EU-wide
- Applies to organizations processing personal data of EU citizens
- Particularly sensitive: personal data, patient data
- Also relevant, but not data protection-specific: EU AI Act



Basic principles (Art 5 GDPR)

- Legality, processing in good faith, transparency
- Purpose limitation
- Data minimization
- Accuracy
- Storage limitation (time-bound)
- Integrity and confidentiality (data security)
- Accountability of data processing entities

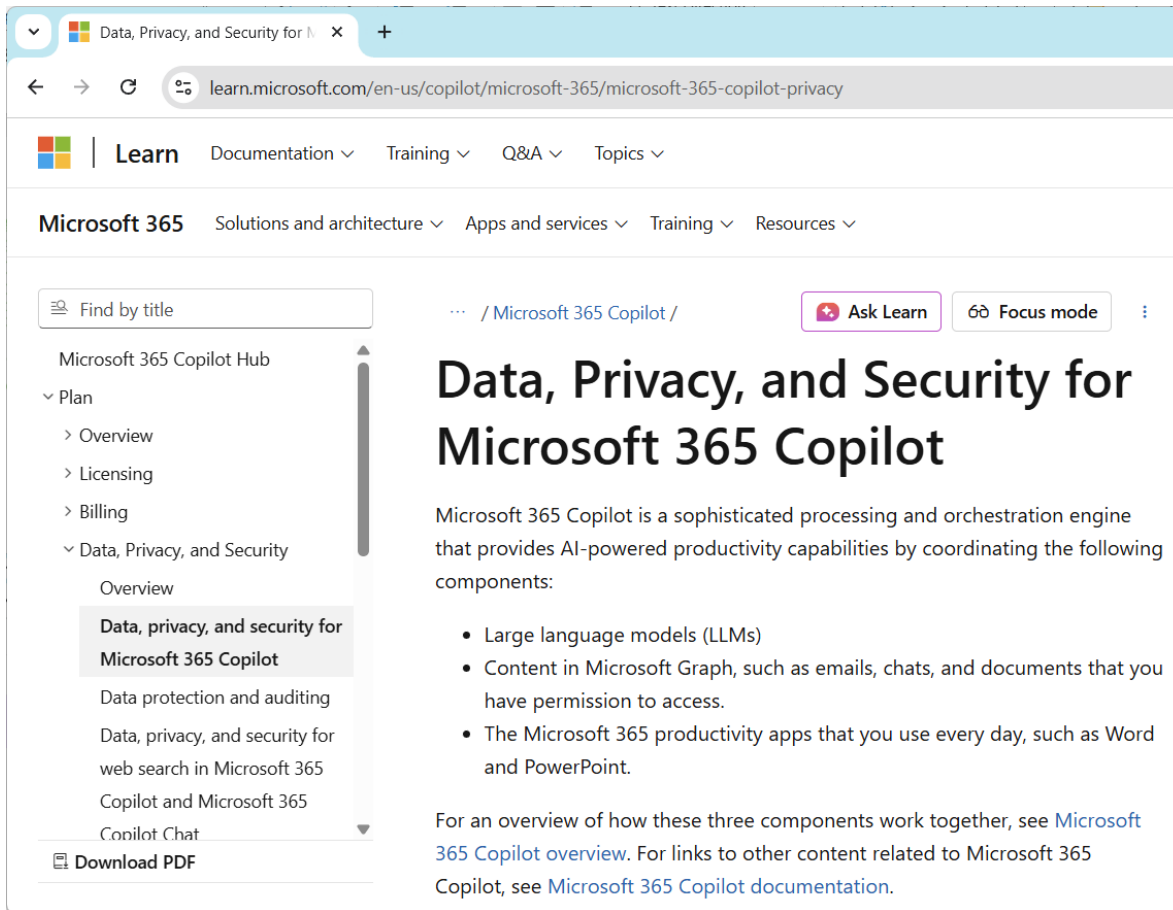
We may process personal data only with AI system , if consent is given and the data is necessary to answer a given question

Forced to delete data (or not record it), if reason for keeping it is no longer valid.

-> **We're not allowed to record or keep data just in case later may be an AI model for it.**

Example: Microsoft Copilot

Generative AI in Office-products



learn.microsoft.com/en-us/copilot/microsoft-365/microsoft-365-copilot-privacy

Learn Documentation Training Q&A Topics

Microsoft 365 Solutions and architecture Apps and services Training Resources

Find by title

Microsoft 365 Copilot Hub

Plan

- Overview
- Licensing
- Billing
- Data, Privacy, and Security

Overview

Data, privacy, and security for Microsoft 365 Copilot

Data protection and auditing

Data, privacy, and security for web search in Microsoft 365 Copilot and Microsoft 365 Copilot Chat

Download PDF

/ Microsoft 365 Copilot /

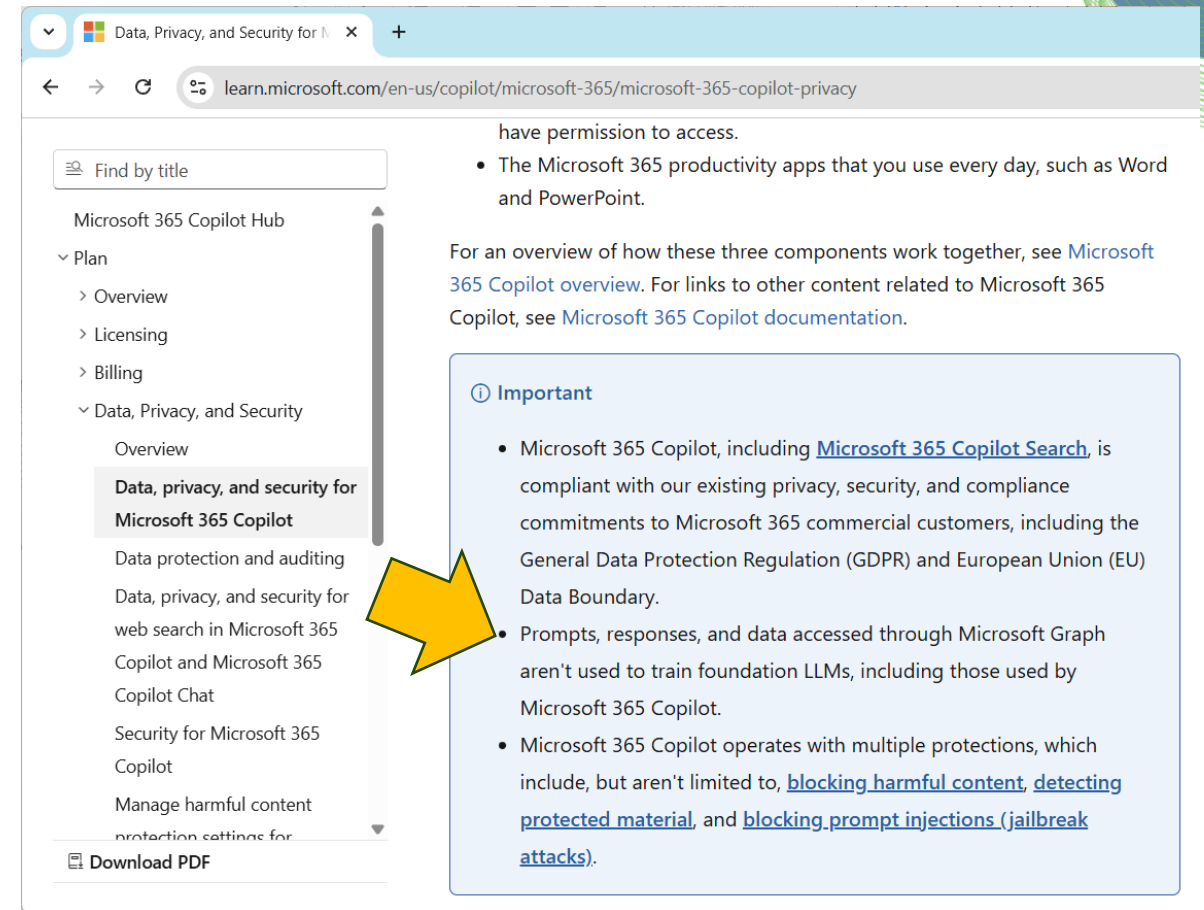
Ask Learn Focus mode

Data, Privacy, and Security for Microsoft 365 Copilot

Microsoft 365 Copilot is a sophisticated processing and orchestration engine that provides AI-powered productivity capabilities by coordinating the following components:

- Large language models (LLMs)
- Content in Microsoft Graph, such as emails, chats, and documents that you have permission to access.
- The Microsoft 365 productivity apps that you use every day, such as Word and PowerPoint.

For an overview of how these three components work together, see [Microsoft 365 Copilot overview](#). For links to other content related to Microsoft 365 Copilot, see [Microsoft 365 Copilot documentation](#).



learn.microsoft.com/en-us/copilot/microsoft-365/microsoft-365-copilot-privacy

Find by title

Microsoft 365 Copilot Hub

Plan

- Overview
- Licensing
- Billing
- Data, Privacy, and Security

Overview

Data, privacy, and security for Microsoft 365 Copilot

Data protection and auditing

Data, privacy, and security for web search in Microsoft 365 Copilot and Microsoft 365 Copilot Chat

Security for Microsoft 365 Copilot

Manage harmful content

Download PDF

have permission to access.

- The Microsoft 365 productivity apps that you use every day, such as Word and PowerPoint.

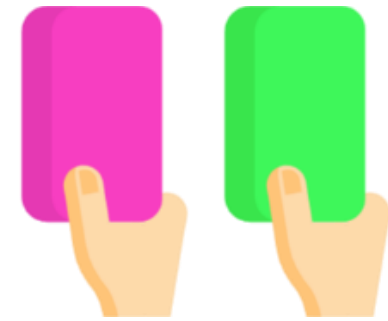
For an overview of how these three components work together, see [Microsoft 365 Copilot overview](#). For links to other content related to Microsoft 365 Copilot, see [Microsoft 365 Copilot documentation](#).

Important

- Microsoft 365 Copilot, including [Microsoft 365 Copilot Search](#), is compliant with our existing privacy, security, and compliance commitments to Microsoft 365 commercial customers, including the General Data Protection Regulation (GDPR) and European Union (EU) Data Boundary.
- Prompts, responses, and data accessed through Microsoft Graph aren't used to train foundation LLMs, including those used by Microsoft 365 Copilot.
- Microsoft 365 Copilot operates with multiple protections, which include, but aren't limited to, [blocking harmful content](#), [detecting protected material](#), and [blocking prompt injections \(jailbreak attacks\)](#).

Quiz: Are we allowed to do this?

Imagine we build a chatbot about responsible use of AI using the content on this website. Is this fine?



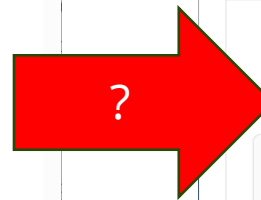
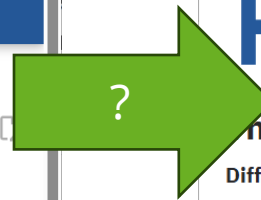
UFZ HELMHOLTZ Centre for Environmental Research RDM Guidelines

Key AI Ethics

According to the [Living Guidelines on the Responsible Use of Generative AI in Research](#), researchers should ensure responsible use of generative AI by:

1. Remain ultimately responsible for scientific output
 - **Researchers are responsible** for the integrity of **AI-generated or AI-supported content**
 - Researchers must **recognize AI's limitations**, including bias, hallucinations, and inaccuracies.
 - **AI systems are neither authors nor co-authors.** Authorship implies agency and responsibility, so it lies with human researchers.
 - **No fabricated AI material:** Researchers must not falsify, alter, or manipulate ****original research data** using AI.

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BLABLADOR - The experimental large language model server!

HELMHOLTZ AI

Artificial Intelligence Cooperation Unit

This is **BLABLADOR**, our experimental large language model server! 🦜

Different models might be available at Alex Strube's whim. These are the models currently running:

0 Mistral-Nemo-Instruct-2407 - Our fast-experimental - with a large context size

Remember: I am a BLABLADOR! Not all I say is true or even real. All output here is AI-Generated

Who is responsible for AI-generated text?

The human researchers are ultimately responsible for AI-generated text. Here's why:

1. **Authorship and Accountability:** Authorship implies agency and responsibility. When researchers use AI to generate text, they are responsible for ensuring the accuracy, validity, and integrity of that text. They must review, fact-check, and vet the AI-generated content to ensure it aligns with scientific standards and ethical guidelines.
2. **Decision Making:** It's the researchers' responsibility to make decisions about what data to use, what

AI-Regulation of the European Union

“EU AI Act”

Robert Haase

EU AI Act - Definitions

AI models

AI systems

AI-Operators

AI-Providers

Users

Affected individuals

Artificial Intelligence (AI)

- **AI models** (e.g. language models):
 - Text-to-text
 - image generation, -interpretation,...
 - Examples: GPT, Gemini, llama, DeepSeek, Teuken...
- **AI systems**: Combination of [language] models with:
 - web-search,
 - document management,
 - databases, ...
 - Examples: ChatGPT, Perplexity, You.com



AI4Science @ UFZ
Robert Haase
@haesleinhuepf
Nov/Dec 2025

See also Art 3 EU AI Act: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32024R1689>

AI-Provider and AI-Operator according to the EU-AI Act

AI-Provider (Provider)

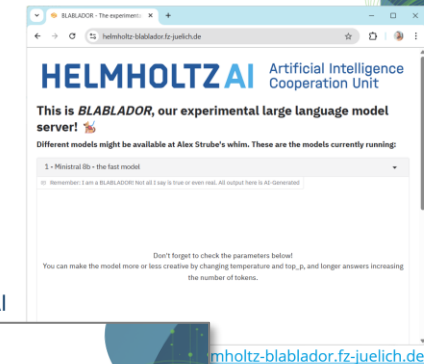
- Markets a service or a product based on AI-systems/-models

AI-Operator (Deployer)

- provides an AI-system for own use under own supervision
- Exception according to EU AI Act: personal, non-professional use

Scientific research

- Largely outside the scope of the EU AI



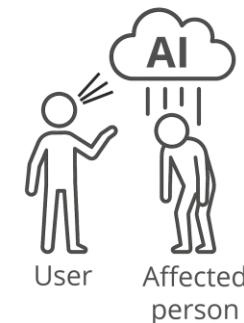
Users and Affected persons

Users (during work duties)

- Persons who employ AI-systems to process data
- Have to be trained to use AI systems

Affected persons

- People whose data is processed by AI or who experience consequences of the processing (direct or indirectly)



AI4Psychology
Robert Haase
@haesleinhuepf
26. Mai 2025

Figure was created using ChatGPT and post-processed

5



Quiz: Classification of the Helmholtz Association

What are “we” in the context of the EU AI Act?

Provider



Operator



User



Affected



Scope EU AI Act

According to Article 2 (Scope)

- Providers, operators, importers, and distributors of AI systems/models within and outside the EU, as long as the EU is affected in a relevant way, e.g., an AI system produces text within the EU.
- Product providers who use AI in products.
- Affected individuals within the EU.

Out of scope EU AI Act

Excerpt EU AI Act Article 2 (Scope):

“6. This Regulation does not apply to AI systems or AI models, including their output, specifically developed and put into service for the sole purpose of scientific research and development.”

“10. This Regulation does not apply to obligations of deployers who are natural persons using AI systems in the course of a purely personal non-professional activity.”

“12. This Regulation does not apply to AI systems released under free and open-source licences, unless they are placed on the market or put into service as high-risk AI systems or as an AI system that falls under Article 5 or 50.”

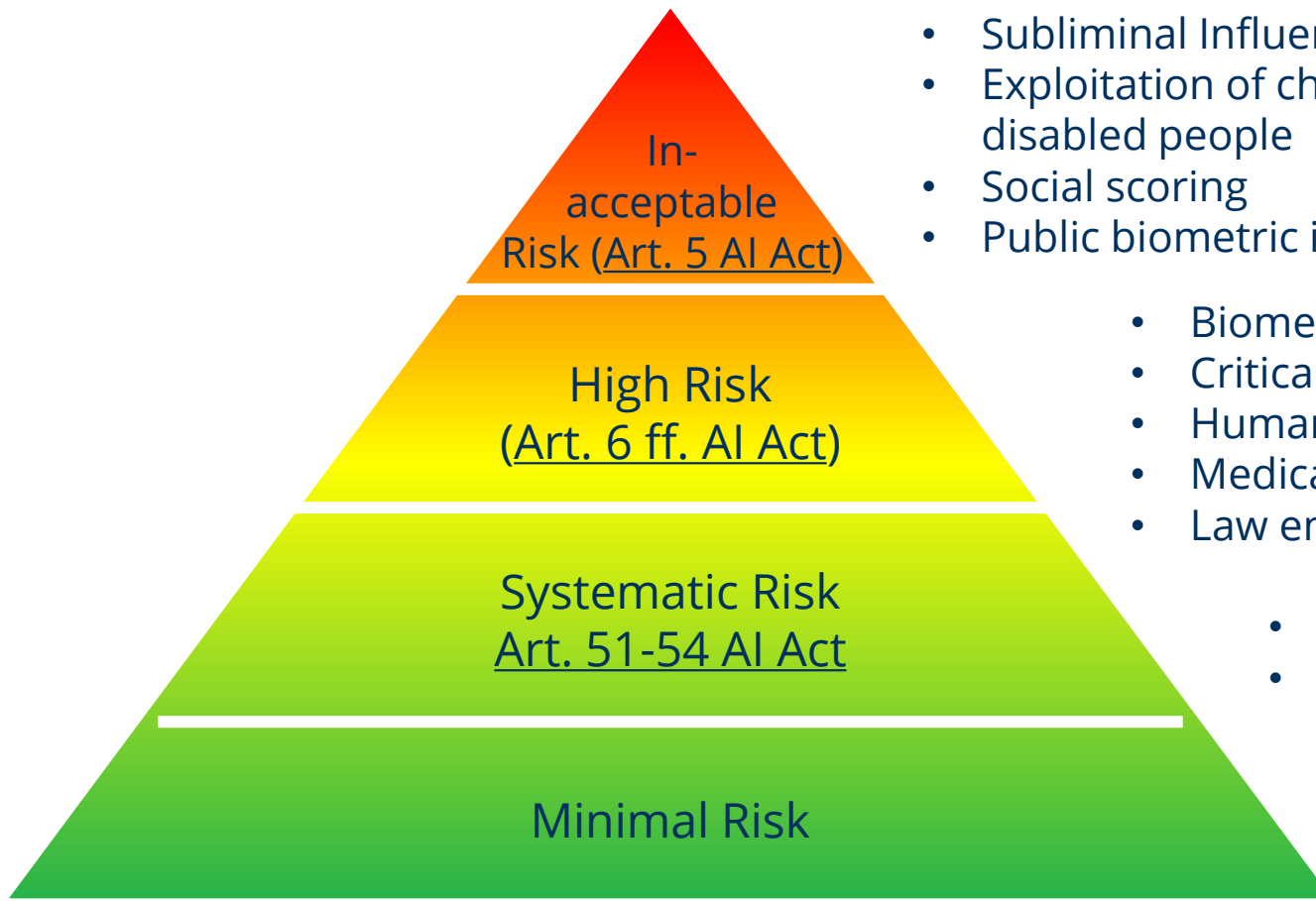
(5: Prohibited AI-Practices

50: Transparency obligations)

EU AI Act – Risk-Based Approach

Categorization of AI Systems by Risk

Consequences



- Subliminal Influence
- Exploitation of children or mentally disabled people
- Social scoring
- Public biometric identification

- Biometrics
- Critical infrastructure
- Human resources
- Medical devices
- Law enforcement

- Chatbots
- Deepfakes

- Computer Games
- Spam Filters
- Product Suggestions



Quality Assurance
/ External Review

Human
Oversight

Risk-
management

Documentation
Obligation

Transparency
Obligation

If applicable.
Adhere to data
protection policies
requirements

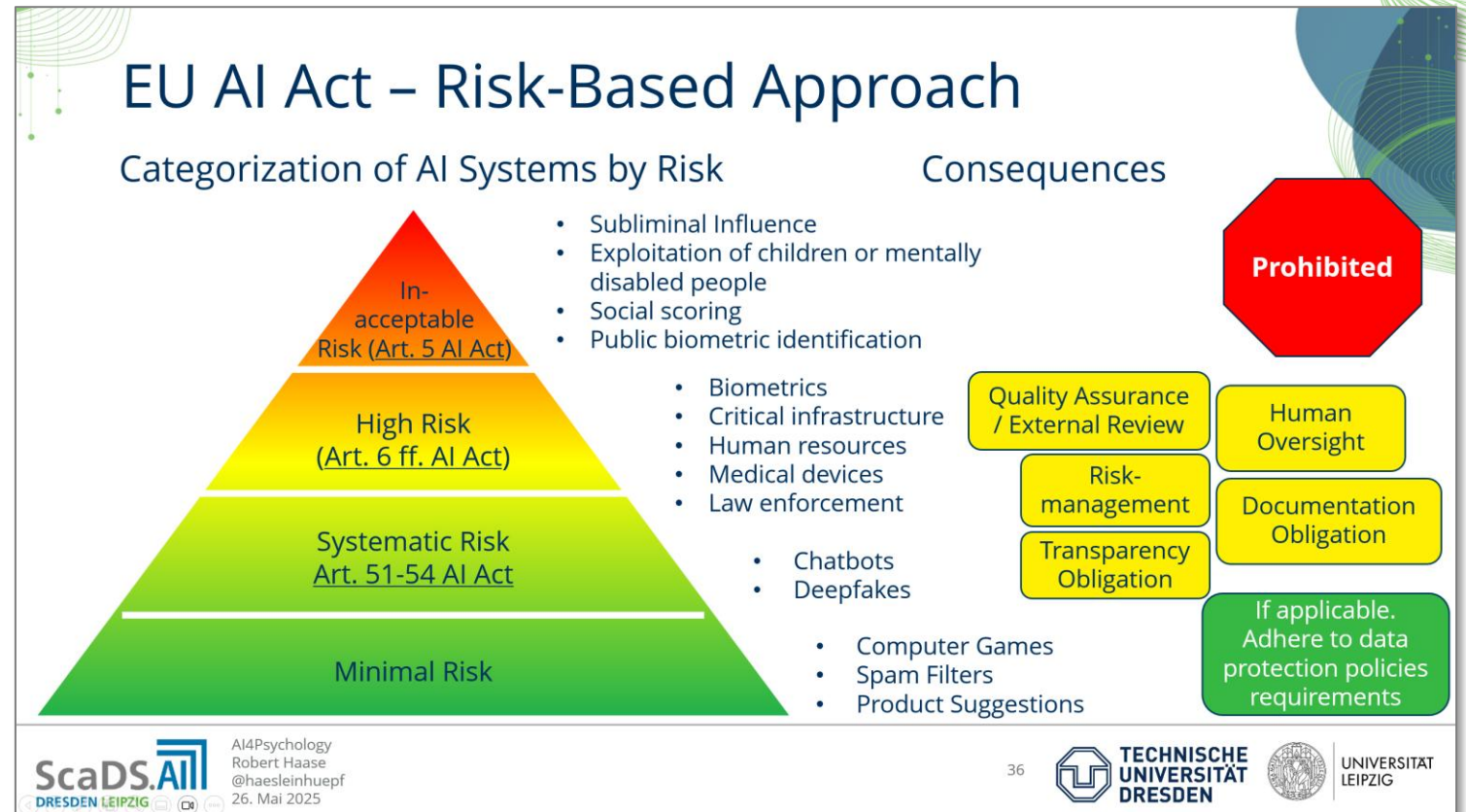
Exercise: Risk assessment

Assume we use an LLM to summarize applications to the graduate school / PhD program.

Who is affected?

How high is the risk?

What consequences do you see?



Documentation obligation / Transparency

Users must be able to

- trace AI-assisted decision processes,
- contest AI-based decisions,
- deny the processing of their data.

Providers and developers have to

- document algorithms,
- incl. risk assessment,
- ensure to oversee decisions by humans.

These aspects make many usage scenarios, e.g. in research de facto impossible

Language models make mistakes

...just like humans 

Translate this to german: A general-purpose AI model shall be presumed to have high impact capabilities pursuant to paragraph 1, point (a), when the cumulative amount of computation used for its training measured in floating point operations is greater than 10^{25} .

Ein Allzweck-KI-Modell gilt gemäß Absatz 1, Punkt (a), als mit hohen Auswirkungen versehen, wenn die kumulative Menge der für sein Training verwendeten Berechnungen, gemessen in Gleitkommaberechnungen (FLOPs), größer als 10^{15} ist.

The user of the language model / author of the translated text is responsible

Language models can correct errors

Bist Du Dir sicher dass die Übersetzung korrekt ist?

“Are you sure?” is a question you can always ask!

Gute Frage – lass uns das nochmal ganz genau anschauen. Hier ist der **Originalsatz**:

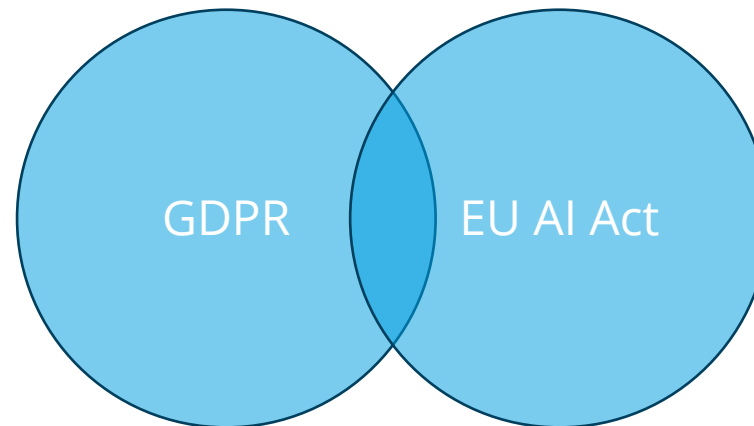
A general-purpose AI model shall be presumed to have high impact capabilities pursuant to paragraph 1, point (a), when the cumulative amount of computation used for its training measured in floating point operations is greater than 10^{25} .

Und hier eine präzisere, wörtlichere und korrektere Übersetzung:

Ein Allzweck-KI-Modell gilt gemäß Absatz 1, Buchstabe a, als mit hohem Wirkungspotenzial versehen, wenn die kumulative Rechenleistung, die für sein Training verwendet wurde – gemessen in Gleitkommaoperationen (Floating Point Operations) – mehr als 10^{25} beträgt.

Conclusion

- EU AI Act and GDPR complement each other in the protection of fundamental rights
- Key elements: risks, accountability, transparency, and human oversight



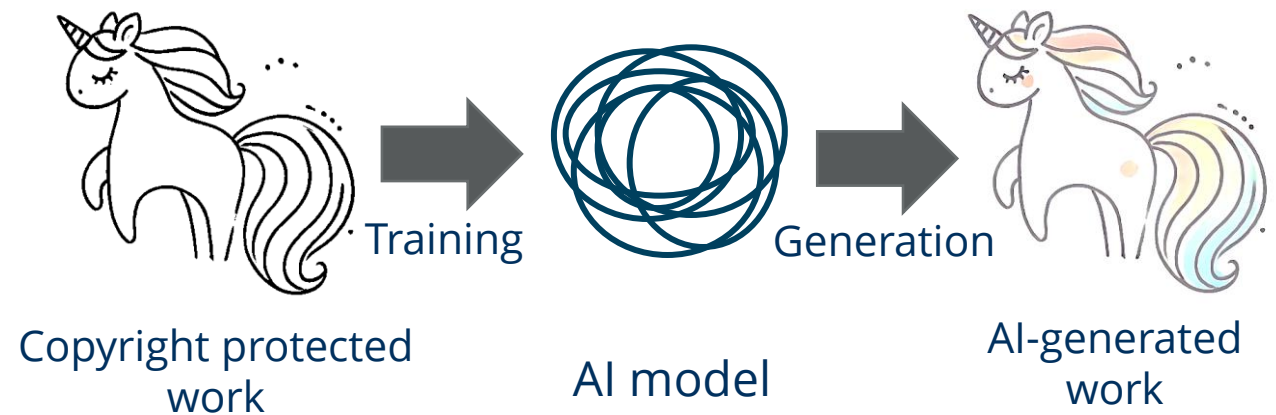
Copyright in the context of Generative AI



Robert Haase

Copyright

- Problem: LLMs are trained using copyright protected works and cite them word-by-word from time to time.
- LLM-Training can be seen as *Text und Data Mining* (legally ok in Germany, [§44 UrhG](#))
- Authors of AI-generated works are responsible
- Detecting copyright infringements is tricky.
- Take care of degree of intellectual property value ("Schöpfungshöhe")



AI-generated plagiarism

When generating text you are not entirely safe...

... depending on the use case

Formulate a short text about the EU AI Act



The EU AI Act is the European Union's landmark regulation designed to ensure that artificial intelligence is developed and used safely, ethically, and transparently. It applies a risk-based approach: minimal-risk AI faces few obligations, while high-risk systems—such as those used in healthcare, critical infrastructure, or law enforcement—must meet strict requirements on data quality, oversight, and transparency. The Act also bans certain harmful AI practices, including social scoring and manipulative biometric systems. Overall, it aims to protect fundamental rights while supporting innovation across the EU.

How could plagiarism suddenly appear here?

Correct the typos in this text:

The EU AI Act is a major european rule ment to make sure artificail intelligence is used safley, fairly and with more transparency. It sorts AI into diferent riks levels, where low-risk tools have feewer demands while high-risk sistems—like those in helthcare or transport—must folow stricter standarts on data, human oversite and cleer explanaitons. The law also forbids certain dangrous uses, such as socail scoring or manipualtive biometric tech, aiming to keep peoples' rights proteced while still encouraging inovation.



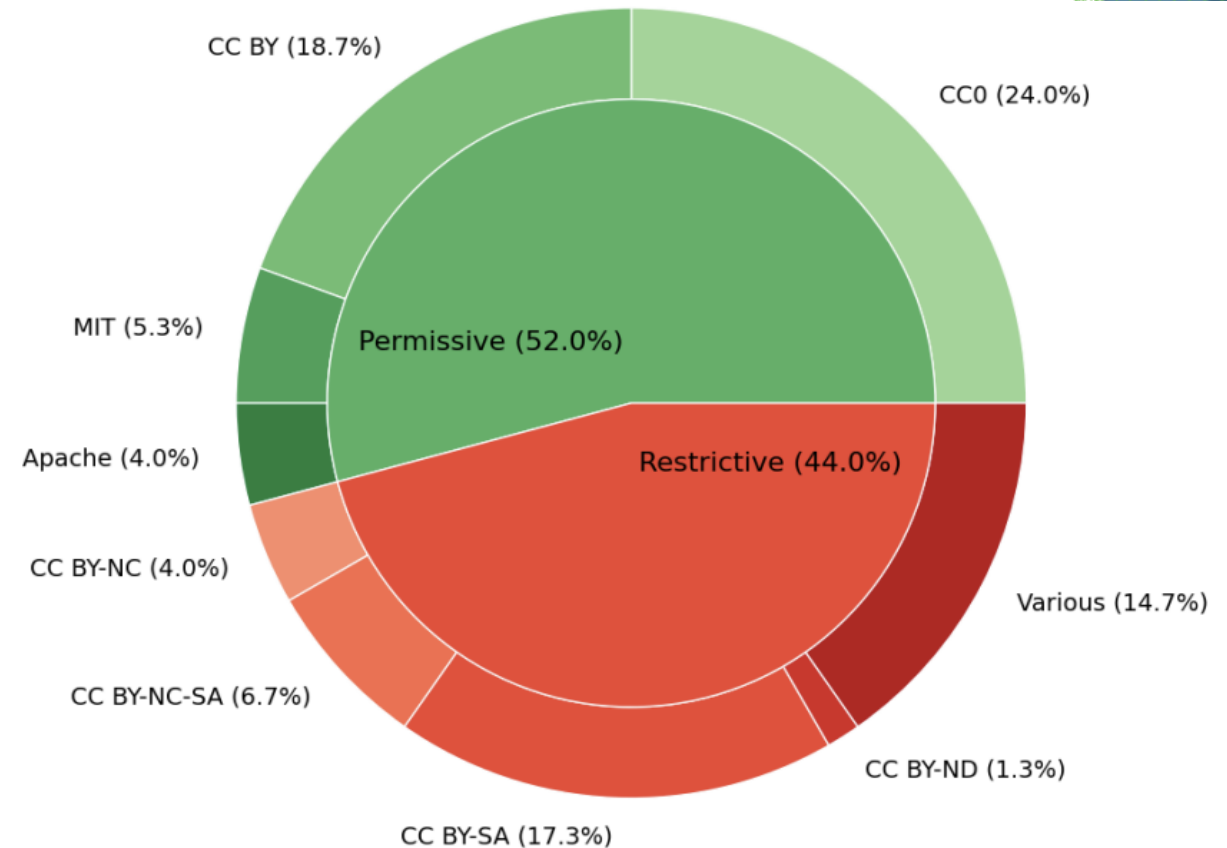
Corrected Text:

The EU AI Act is a major **European** rule **meant** to make sure **artificial intelligence** is used **safely**, fairly and with more **transparency**. It sorts AI into different **risk** levels, where low-risk tools have **fewer** demands while high-risk **systems**—like those in **healthcare** or transport—must **follow** stricter **standards** on data, human **oversight** and **clear explanations**. The law also forbids certain **dangerous** uses, such as **social** scoring or **manipulative** biometric tech, aiming to keep **people's** rights **protected** while still **encouraging innovation**.

Practical Tip: The Teuken-...-commercial Model

There are models trained specifically to avoid copyright infringements.

“Teuken-7B-instruct-research-v0.4’ can be used for research purposes, ‘Teuken-7B-instruct-commercial-v0.4’ is available to companies for commercial purposes under the “Apache 2.0” license. [...] some of the data sets used for instruction tuning exclude commercial use and therefore were not used in the Apache 2.0 version.”



Copyright-violations (Benchmark)

The model *OpenGPT-X 7B* commits measurably only very few copyright violations. Successor model Teuken probably as well.

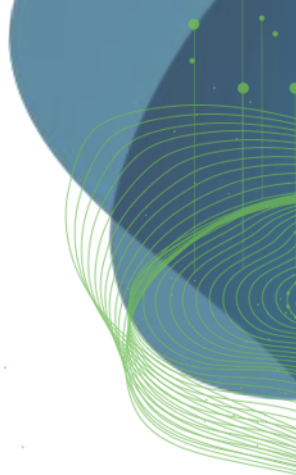
“The significant reproduction rate is the average number of characters per book that are part of a literal reproduction of original text in excess of the **legality presumption of up to 160 characters**.” Mueller et al 2024

Predecessor of Teuken 7B

	SRR-Copyright	SRR-Public Domain
GPT 4	774.5	33034.1
GPT 3.5	61.5	2716
Llama 2 (70 B)	697.2	1898.7
Alpaca (7B)	3.6	158.5
Vicuna (13 B)	521.7	3446.8
Luminous (70B)	6.2	217.8
OpenGPT-X (7B)	0.3	0

Exercises

Robert Haase



Exercise: AI-Detectors

Upload ufz-leipzig.pdf into commercially available AI-Detectors and test them out.

The UFZ Leipzig: A Leading Hub for Environmental Research

The **Helmholtz Centre for Environmental Research (UFZ)** in Leipzig is one of Europe's most influential institutions dedicated to understanding and protecting our natural environment. Founded in 1991, the UFZ focuses on the complex interactions between humans and nature, aiming to provide science-based solutions for the major environmental challenges of our time—climate change, biodiversity loss, pollution, and sustainable resource use.

At its Leipzig headquarters, researchers from disciplines such as ecology, hydrology, environmental chemistry, data science, economics, and social sciences work together in an interdisciplinary framework. This collaborative approach enables the UFZ to study environmental systems as interconnected networks rather than isolated components. The facility hosts state-of-the-art laboratories, long-term observation programs, modeling platforms, and innovation hubs that bridge fundamental science with practical applications.

The UFZ is internationally recognized for its expertise in areas like groundwater research, ecosystem services, environmental microbiology, and climate impact modeling. It contributes to major national and global initiatives, works closely with universities in Leipzig and beyond, and provides policy guidance to governmental and non-governmental organizations.

By combining rigorous science with a commitment to sustainability and societal relevance, the UFZ Leipzig plays a central role in shaping the environmental knowledge and policies needed for a resilient and sustainable future.

This text was generated using ChatGPT 5.1.



The screenshot shows the SciSpace AI Detector web application. The browser address bar displays 'scispace.com/ai-detector'. The page title is 'Academic AI Detector'. Below the title, a description states: 'SciSpace AI Detector instantly spots ChatGPT, GPT-4, Gemini, Llama and Claude's text, rates originality, and explains risky lines. Proven to outperform GPTZero, ZeroGPT, and Grammarly. [View benchmarking study](#).' The interface has two tabs: 'Input Text' and 'Upload PDF', with 'Upload PDF' being the active tab. Below the tabs, a preview of the document 'ufz-leipzig.pdf' is shown, indicating it was uploaded on 29 November 2025 and contains 417 words (3352 characters). The detection result is 'Essentially Human 3%'. A table provides a breakdown of AI weightage by content weightage and sentence count.

AI weightage	Content weightage	Sentences
Highly AI written	17% Content	4
Moderately AI written	17% Content	4
Lowly AI written	12% Content	3

To the right of the document preview, an 'AI detection report' shows a 3% AI score, labeled 'Essentially Human'. It includes a summary: 'The text is written almost entirely by a human, with little to no AI assistance.' Below this, it lists 'PROBABLE AI SENTENCES' with 1 icon, showing 4 sentences of 'High AI' and 4 sentences of 'Moderate AI'.

Exercise: Bias Detection

Generate feedback about a meeting protocol

- Generic feedback
- Specific feedback
 - Diversity
 - Professional correctness / suitability
 - ...

Note: You can also accidentally establish bias with this method .

Meeting Protocol – Symposium Planning

Date: April 3, 2025, 10:00 – 10:35 AM (Zoom)

Participants: Dr. Thomas Becker, James Müller, William Schubert

Discussion Points:

1. Topic & Objectives

- Consensus on an interdisciplinary approach.
- Proposal by Schubert accepted: “Climate research using ChatGPT”

2. Possible Speakers

Suggestions (Müller):

- Dr. Richard Müller (City Administration Zurich)
- Dr. Anton Berg (AI in Climate Research, UFZ Leipzig)
- Prof. Josef Angermann (Administrative Director University Hospital Dresden)

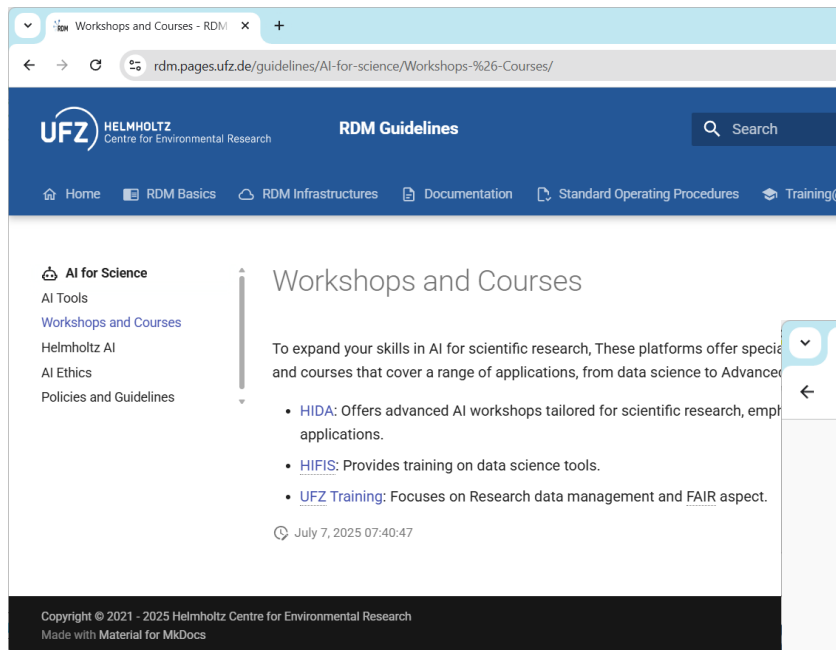
Becker emphasizes that all invited speakers should be internationally known.

Decision: Contact all three potential speakers by next week.

Next Meeting: April 14, 2025, 10:00 AM (online)

End of Meeting: 10:35 AM

Learn more...



Workshops and Courses - RDM

rdm.pages.ufz.de/guidelines/AI-for-science/Workshops-%26-Courses/

UFZ HELMHOLTZ Centre for Environmental Research

RDM Guidelines

Home RDM Basics RDM Infrastructures Documentation Standard Operating Procedures Training

AI for Science

- AI Tools
- Workshops and Courses
- Helmholtz AI
- AI Ethics
- Policies and Guidelines

Workshops and Courses

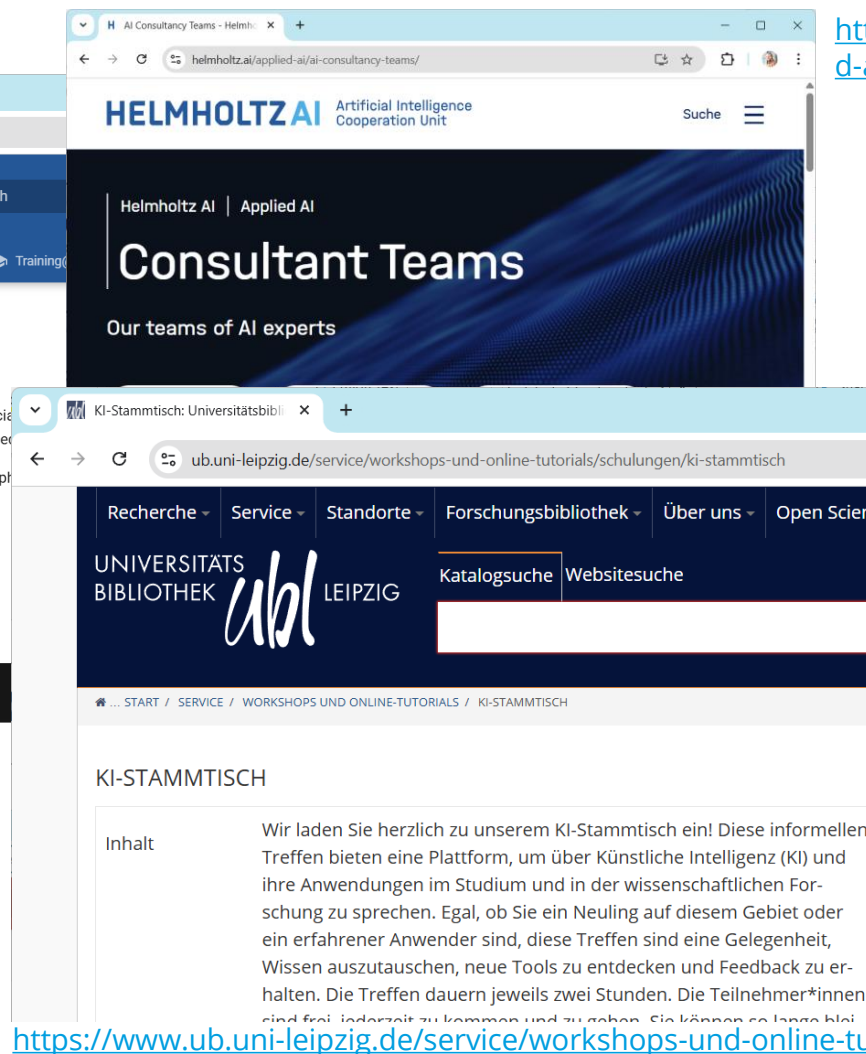
To expand your skills in AI for scientific research, These platforms offer special workshops and courses that cover a range of applications, from data science to Advanced AI.

- HIDA:** Offers advanced AI workshops tailored for scientific research, emphasizing data science and AI applications.
- HIFIS:** Provides training on data science tools.
- UFZ Training:** Focuses on Research data management and FAIR aspect.

July 7, 2025 07:40:47

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<https://rdm.pages.ufz.de/guidelines/AI-for-science/Workshops-%26-Courses/>



HELMHOLTZ AI Artificial Intelligence Cooperation Unit

Consultant Teams

Our teams of AI experts

Recherche Service Standorte Forschungsbibliothek Über uns Open Science

UNIVERSITÄTS BIBLIOTHEK ubl LEIPZIG

Katalogsuche Websitesuche

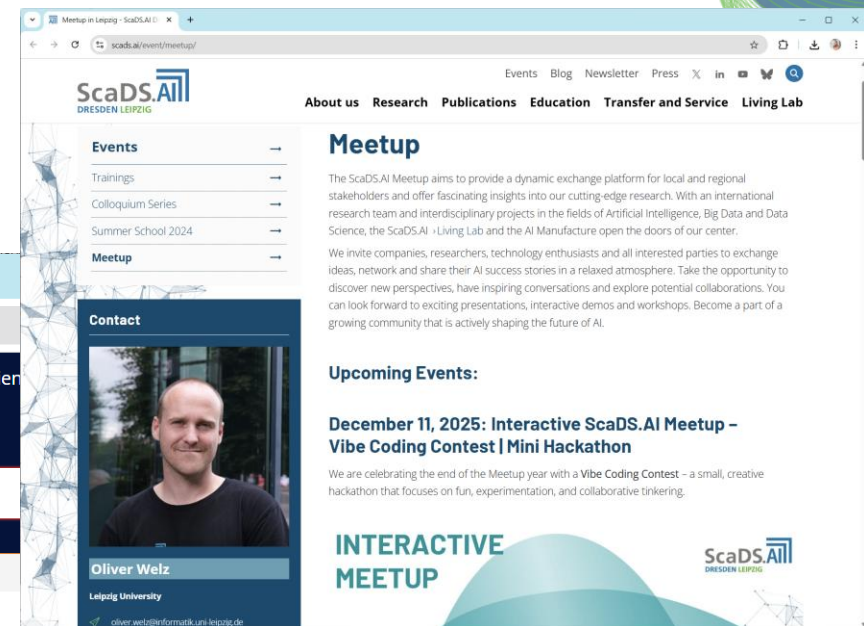
KI-STAMMTISCH

Inhalt

Wir laden Sie herzlich zu unserem KI-Stammtisch ein! Diese informellen Treffen bieten eine Plattform, um über Künstliche Intelligenz (KI) und ihre Anwendungen im Studium und in der wissenschaftlichen Forschung zu sprechen. Egal, ob Sie ein Neuling auf diesem Gebiet oder ein erfahrener Anwender sind, diese Treffen sind eine Gelegenheit, Wissen auszutauschen, neue Tools zu entdecken und Feedback zu erhalten. Die Treffen dauern jeweils zwei Stunden. Die Teilnehmer*innen sind frei, jederzeit zu kommen und zu gehen. Sie können sich gerne bei uns melden.

<https://www.ub.uni-leipzig.de/service/workshops-und-online-tutorials/schulungen/ki-stammtisch>

<https://www.helmholtz.ai/applied-ai/ai-consultancy-teams/>



ScaDS.AI DRESDEN LEIPZIG

About us Research Publications Education Transfer and Service Living Lab

Meetup

The ScaDS.AI Meetup aims to provide a dynamic exchange platform for local and regional stakeholders and offer fascinating insights into our cutting-edge research. With an international research team and interdisciplinary projects in the fields of Artificial Intelligence, Big Data and Data Science, the ScaDS.AI - Living Lab and the AI Manufacture open the doors of our center. We invite companies, researchers, technology enthusiasts and all interested parties to exchange ideas, network and share their AI success stories in a relaxed atmosphere. Take the opportunity to discover new perspectives, have inspiring conversations and explore potential collaborations. You can look forward to exciting presentations, interactive demos and workshops. Become a part of a growing community that is actively shaping the future of AI.

Upcoming Events:

December 11, 2025: Interactive ScaDS.AI Meetup - Vibe Coding Contest | Mini Hackathon

We are celebrating the end of the Meetup year with a Vibe Coding Contest - a small, creative hackathon that focuses on fun, experimentation, and collaborative tinkering.

INTERACTIVE MEETUP

Oliver Welz
Leipzig University
oliver.welz@informatik.uni-leipzig.de

Informationen zur Barrierearmut

KONTAKT Der Chat ist offline. Schreiben Sie uns!

SERVICE

Anmeldung, Konto

<https://scads.ai/event/meetup/>

Conclusion

- AI users / operators / providers have a whole range of obligations when working with AI (accountability, risks, documentation, ...).
- Data subjects have rights! (transparency, objection, ...)
- AI systems technically allow far more usage scenarios than are legally permissible.
- Especially in the clinical context, many types of AI-based data processing are problematic under data-protection law and from an ethical perspective.
- **Conscious and responsible handling** of AI and AI-related risks is essential.

Thank you for your attention!

Contact

Dr. Robert Haase

ScaDS.AI Dresden/Leipzig
Universität Leipzig
Humboldtstraße 25
04105 Leipzig

robert.haase@uni-leipzig.de

GEFÖRDERT VOM



Bundesministerium
für Forschung, Technologie
und Raumfahrt



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Landtags beschlossenen Haushaltes.