Community of Practice KI*PerWeb*

Austausch zur Nutzung und Entwicklung KI-gestützter Webanwendungen

KIPERWEB

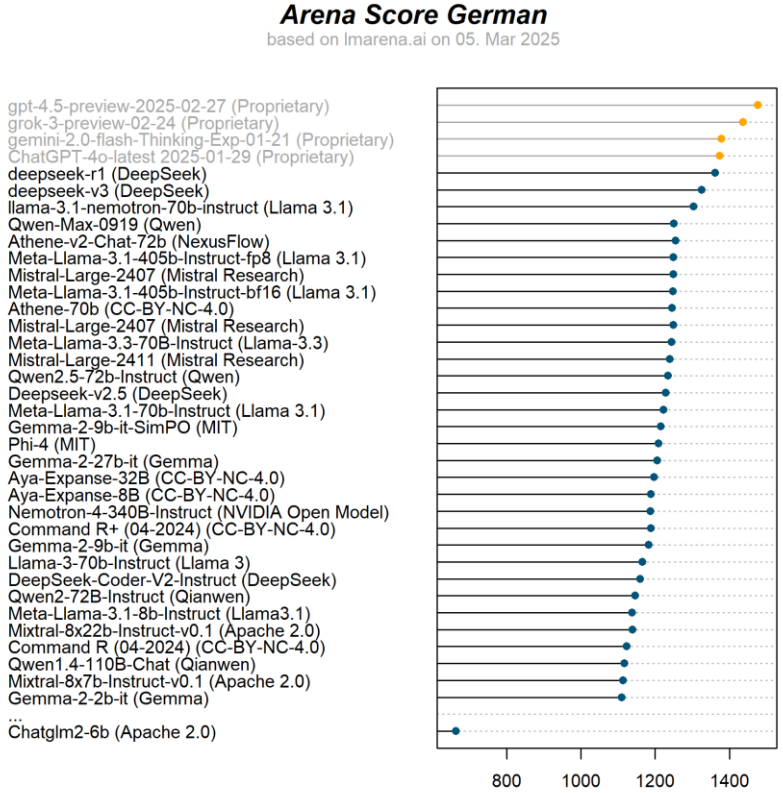
f-bb Forschungsinstitut Betriebliche Bildung

Agenda

- Update
  - News & Leaderboard-Update
- Input
  - „KI-basierte Inhaltsanalyse“
- Diskussion

Leaderboard-Update (05.03.2025)

- Deepseek-r1 in der Kategorie „German“ mittlerweile überholt von mehreren Modellen inkl. Spitzenreiter gpt-4.5-preview
- Arena-Scores von *nicht*-proprietären Modelle sind rechts ausgewiesen sofern sie mindestens das Niveau von Gemma-2-2b-it erreichen:
  - Llama-3.1-nemotron-70b-instruct bleibt das beste open-weights-Modell für „Consumer“-Hardware in der Kategorie „German“,
  - Gemma-2-9b-it-SimPO bleibt das effizienteste open-weights Modell (mutmaßlich hinter Gemma-2-27b-it-SimPO)
- Phi-4 hat weiter Punkte verloren, seine Position jedoch halten können

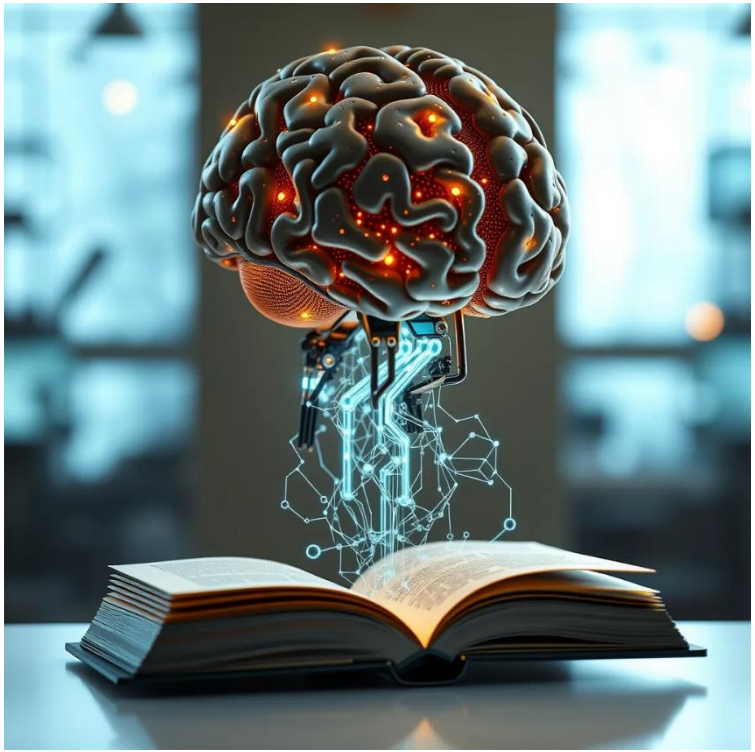


Datengrundlage: https://chat.lmsys.org/?leaderboard

Fokusthema: KI-basierte Inhaltsanalyse

- Prompt „high-tech artificial brain extracts information from a book“

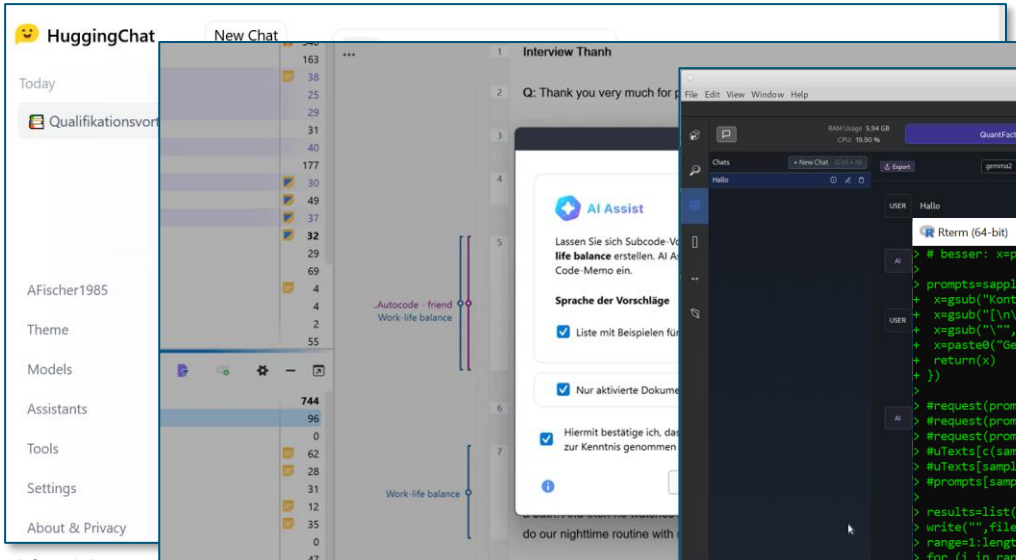
  (rechts visualisiert von FLUX.1-schnell, seed 1558494386)



Quelle: https://huggingface.co/spaces/black-forest-labs/FLUX.1-schnell

Wie kann man sich KI-basierte Inhaltsanalyse vorstellen?

- Allgemeine KI-Systeme (z.B. HuggingChat), MAXQDA‘s KI ASSIST, KI on premises und/oder CLIs



hf.co/chat

https://www.youtube.com/watch?v=VFft6B2cNjs

https://lmstudio.ai/

Gnu R, Python, etc.

AI-based Content Analysis (Fischer, submitted)

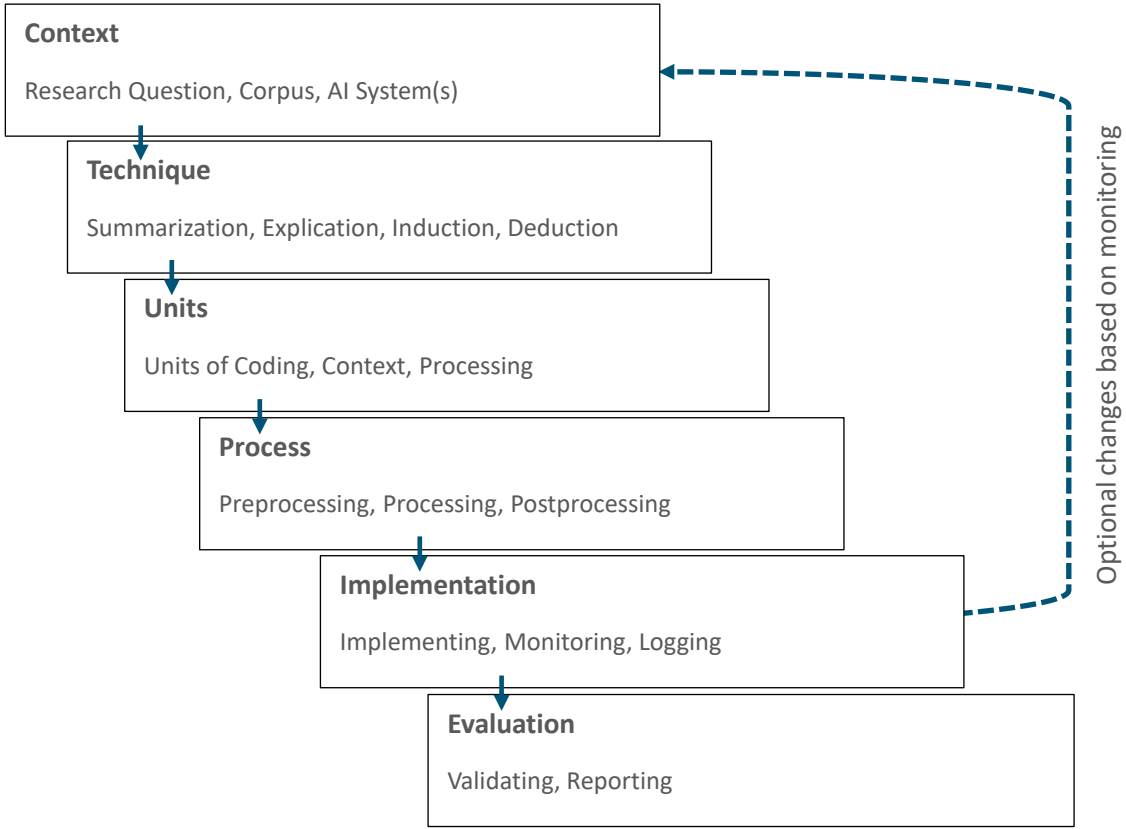
Kategorien KI-basierter Inhaltsanalyse auf Basis von Theoriebezug (vertikal) und Verdichtungsintention (horizontal) nach Fischer (submitted):

AI-based Summarization: AI is applied to generate a neutral summary based on a corpus of specific materials, irrespective of theoretical categories.	**AI-based Explication:** AI is applied to generate an explication of materials within a corpus based on additional materials/context, irrespective of theoretical categories.
AI-based Induction: AI is applied to draw conclusions on theoretical categories and concepts based on a corpus of specific materials.	**AI-based Deduction:** AI is applied to draw conclusions on specific materials within a corpus based on a set of theoretical categories and concepts.

Anknüpfend insb. an Mayring (2022) unter Berücksichtigung von Literatur wie Döring und Bortz (2016)

Source: Fischer, A. (submitted). The Future of Qualitative Content Analysis in the Age of Artificial Intelligence. In: J. Dörpinghaus, M. Tiemann (Eds.), Advances in Computational Social Sciences (tba).

Process Model of AI-based Content Analysis (Fischer, submitted)



Source: Fischer, A. (submitted). The Future of Qualitative Content Analysis in the Age of Artificial Intelligence. In: J. Dörpinghaus, M. Tiemann (Eds.), Advances in Computational Social Sciences (tba).

Exemplary Prompt-Templates (Fischer, submitted)

“Given the following passage from an interview:\n\n\"{passage}\”\n\nPlease

“Given the following list of paraphrases of passages from an interview:\n\n{para

“Given the following summaries of interview passages:\n\n{summaries}\n\n.Please create a bullet-point summary of these texts!”

Source: Fischer, A. (submitted). The Future of Qualitative Content Analysis in the Age of Artificial Intelligence. In: J. Dörpinghaus, M. Tiemann (Eds.), Advances in Computational Social Sciences (tba).

Diskussion

- Potenziale?
- Grenzen?
- Herausforderungen?