Additional resources

Please note that the following list of resources is intended to provide further reading materials on the subject of responsible use of generative AI in research. It is important to recognize that this list is not exhaustive and does not cover all aspects of the topic, and it is under construction.

Disclaimer: The ideas and opinions expressed in these resources do not necessarily reflect those of the workshop presenter or the Digital Research Academy. Participants are encouraged to critically evaluate the content and use their discretion in applying the knowledge gained in their research practices.

1. Deep dive into AI technology

- Andrew Ng's course: Generative AI for Everyone
- Andrej Karpahthy youtube video: <u>Intro to Large Language Models</u>
- "80000 hours" podcast compilation on Artificial Intelligence

2. About the impact of generative AI in research - Information and tools

2.1 Information

- "Generative AI makes knowledge workers 25% faster and 40% better"
 Ethan Mollicks's <u>blog post</u> on the preprint <u>"Navigating the jagged frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality
 </u>
- Ethan Mollicks's blog post "How to use AI to do stuff"

2.2 Tools

- <u>Perplexity.ai</u>: answering questions with verifiable sources, exploring topics in depth with follow-up questions.
- <u>ChatGPT</u>: summarize text, make first drafts, brainstorming, improve text, coding, use as your writing or research mentor by asking feedback and advice, prepare for an interview, learn a language. ChatGPT4 Plus also includes advanced data analysis, Dall-E for image generation and other plugins, allows uploading files.
- DeepL Write Beta: grammar check, spelling check, paraphrasing.
- For exploring the scientific literature:
 - <u>Elicit</u>: ask a research question and get a summary of sources, create tables of the results: main findings, intervention, region etc.
 - o Research rabbit: discover and visualise author networks, similar work.
 - Connected papers: get a visual overview of a new academic field, visualise trends and discover important recent papers, prior and derivative work.
 - <u>Paper digest</u>: review the literature using key-words, filter by year, get quick summaries for further exploration.
 - <u>ExplainPaper</u>: upload a research paper and ask for explanations for complex text passages and equations, break down information in simple words.

3. Critic of AI research and use

- Iris van Rooiji blog post "Stop feeding the hype and start resisting"
- Youtube video "Understanding LLMs and Breaking Down the Al Hype, with Dr. Alex Hanna
 Prof. Emily M. Bender"
- Widder et al. 2023 <u>research paper</u> "Open (For Business): Big Tech, Concentrated Power, and the Political Economy of Open Al"
- Bender et al. 2021 <u>research paper</u> "On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?"

4. Best practices (in construction)

- How to record the use of LLMs in academic papers: <u>Transparency Guidance for ChatGPT</u> Usage in Scientific Writing Balazs Aczel & Eric-Jan Wagenmakers
- <u>ZeroGPT</u>: Detects Al generated text. Be careful, the accuracy of these models is *still* not great.