



Open Universiteit

Using AI Effectively and Responsibly in Research

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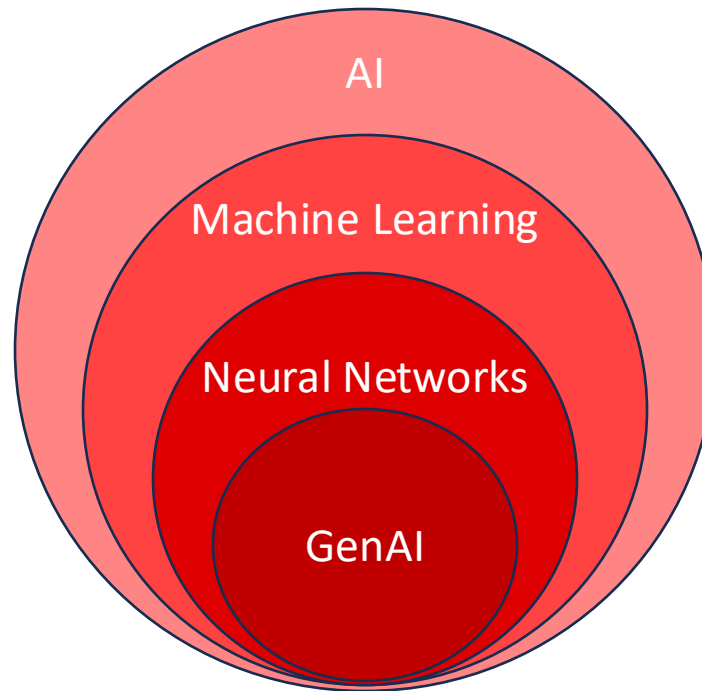
Statement 1:

AI in research is a recent development



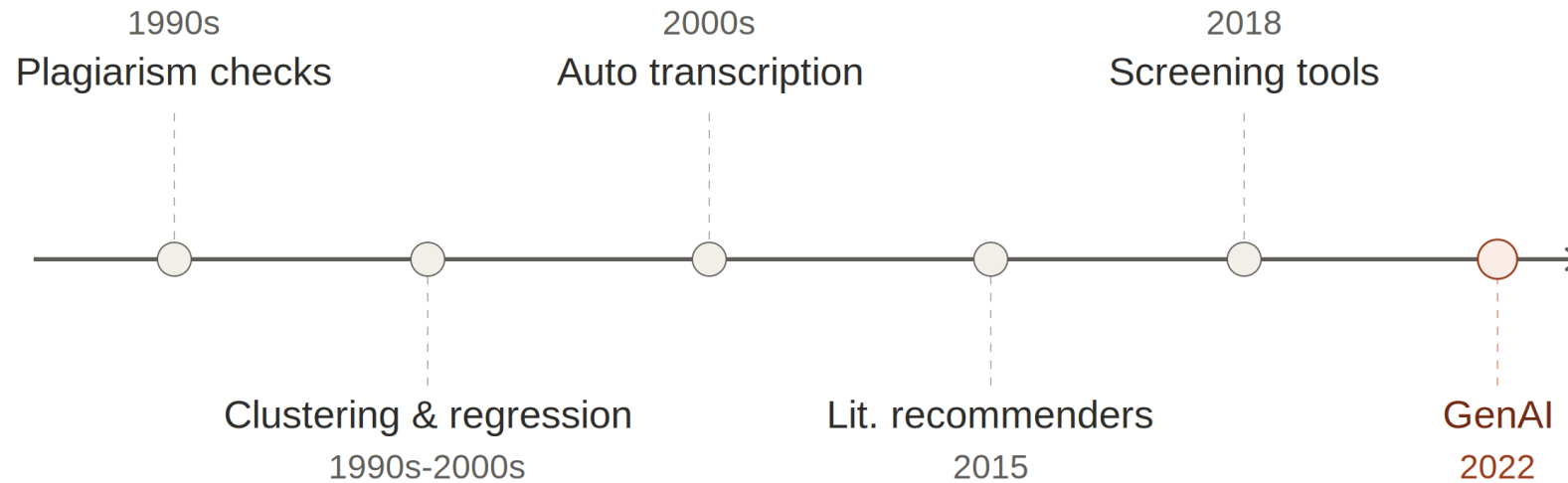


EXPLANATION STATEMENT 1





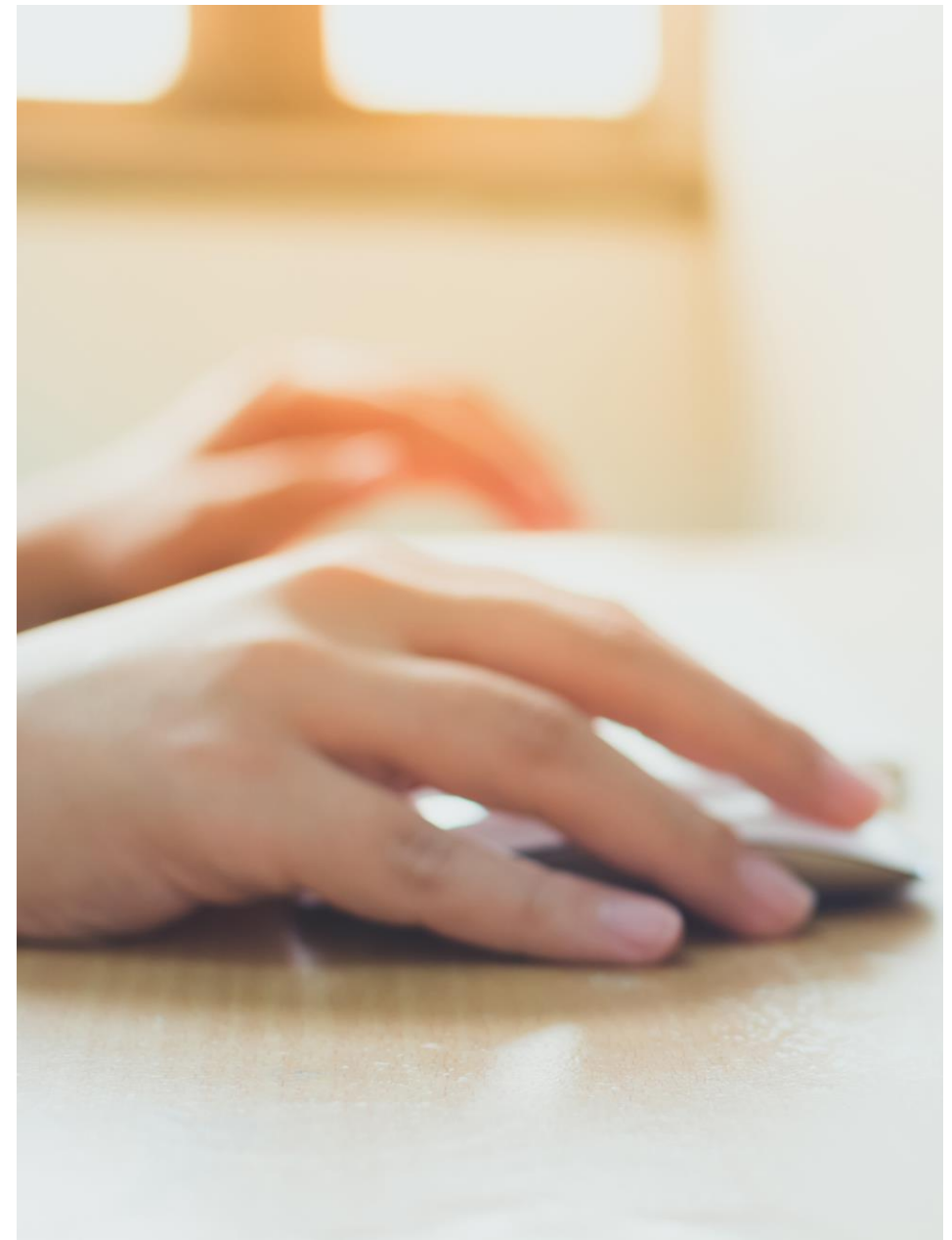
EXPLANATION STATEMENT 1





Statement 2:

Formatting references by hand is a
waste of time now
that AI can do it for you.





EXPLANATION STATEMENT 2

- Hallucinated sources: AI generates citations that look plausible (real-sounding authors, titles, journals) but do not exist, or do not say what is claimed
- Formatting errors: Mixed citation styles, inconsistent formatting
- Tip: Check co-author references, as you are also responsible





EXPLANATION STATEMENT 2

Elicit

- Searches real papers via the Semantic Scholar corpus
- Summarizes findings, extracts data into tables
- Answers based on full text (open access) or abstract

Scite.ai

- Shows how a paper has been cited: supporting, contrasting, or just mentioning
- Used to verify whether a claim actually holds up
- Not for generating new references, only checking existing ones

Consensus

- Searches 200M+ papers, gives a "consensus" answer across studies
- Every result is linked to its source paper



Statement 3:

Uploading full articles to AI tools for summaries is just... reading, but faster.





EXPLANATION STATEMENT 3

Access $\neq$ redistribution rights: Having institutional/paywall access to read an article is not the same as having the right to share it with a third-party AI tool

Publisher and university license agreements typically cover reading, not redistribution to external platforms

Your upload may become training data

Use institutionally approved tools





Statement 4:

Using AI for admin tasks like emails and scheduling is fine; using it to write your papers is not.





EXPLANATION STATEMENT 4

DO NOT LET AI WRITE YOUR PAPERS!

Be aware of AI in admin tasks

- Automated assistants are privacy-sensitive
- Meetings, emails, etc. have personal information in them
- Especially without recipients' knowledge

Do's

- AI helps with planning
- Helping with the formatting of difficult emails





Statement 5:
An AI can give better feedback
than human colleagues.





EXPLANATION STATEMENT 5

Feedback vs. writing the review

- Using AI to sharpen your own comments is different from letting AI draft the review's actual content and conclusions; one keeps you as the reviewer; the other does not

AI can help you say what you think. Use it for feedback, to also learn from it, instead of to replace some of your skills.





EXPLANATION STATEMENT 5

Bias: AI feedback reflects patterns from its training data, it can favor certain writing styles, arguments, or framings without you noticing why

Confidentiality: Manuscripts under review are unpublished, often confidential. Uploading them to AI shares that text with a third party before the authors (or you!) have agreed to it

Loss of human/social exchange: Peer review is also a professional dialogue: mentoring, field norms, reviewer accountability. An AI comment has no one standing behind it

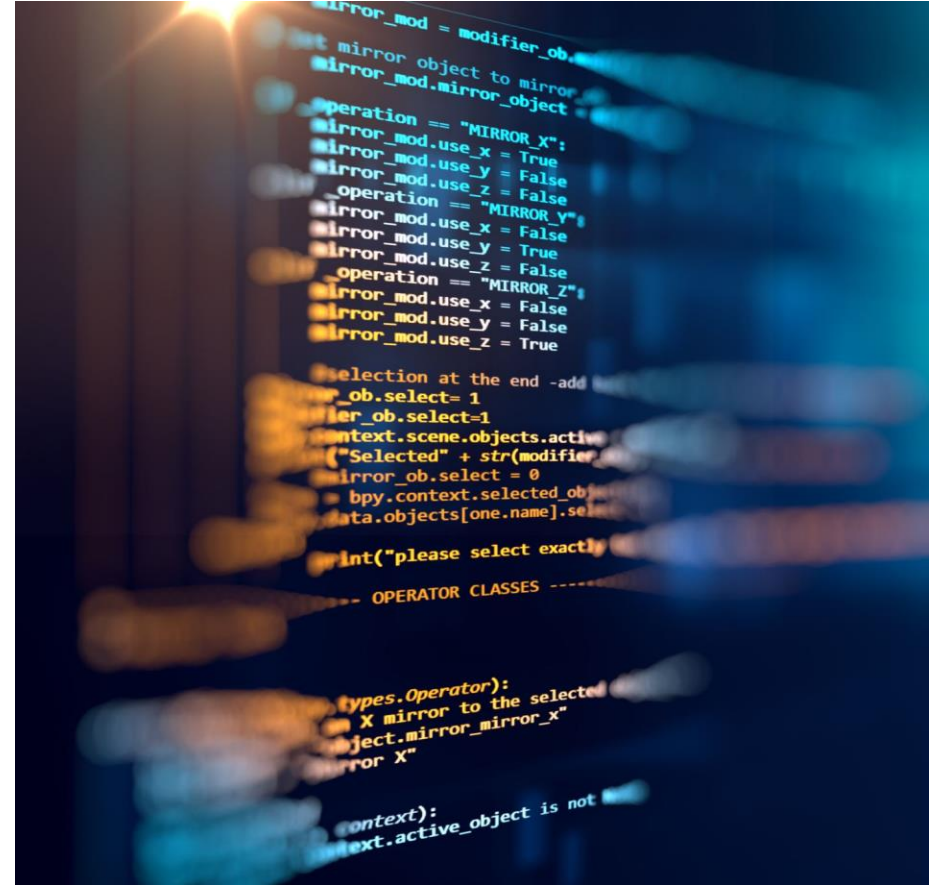
Responsibility & plagiarism: If AI rewrites a review (or feedback) for you and you submit it as your own judgment, you are accountable for content you may not have fully verified





Statement 6:

Using AI to write your analysis code is fine.





EXPLANATION STATEMENT 6

AI can generate working analysis code fast, even for methods you have never used before

The catch:

- Chances are low that you fully understand the thought process and the actual code
- It is harder to find the possible issues in thinking, coding, and debugging if you do not 100% understand it
- It is difficult to explain the steps and defend the result
- You never built the skill yourself

Do: AI can help you learn skills





TIPS & TRICKS

When AI drafts something for you (code, text, visualizations), evaluate it as if a student handed it in. Would you sign off on it? Even without checking it properly?

Check your journal's/funder's AI disclosure policy before you submit; requirements vary a lot

Mind the energy cost. Every prompt has a footprint; do not use a heavy model for a task a smaller tool (or your own head) could do just as well





THANK
YOU