



# Humanizing & Standardizing Artificial Intelligence outputs

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# AI tools

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- Cohere
- Dall-E2

# Paperpal

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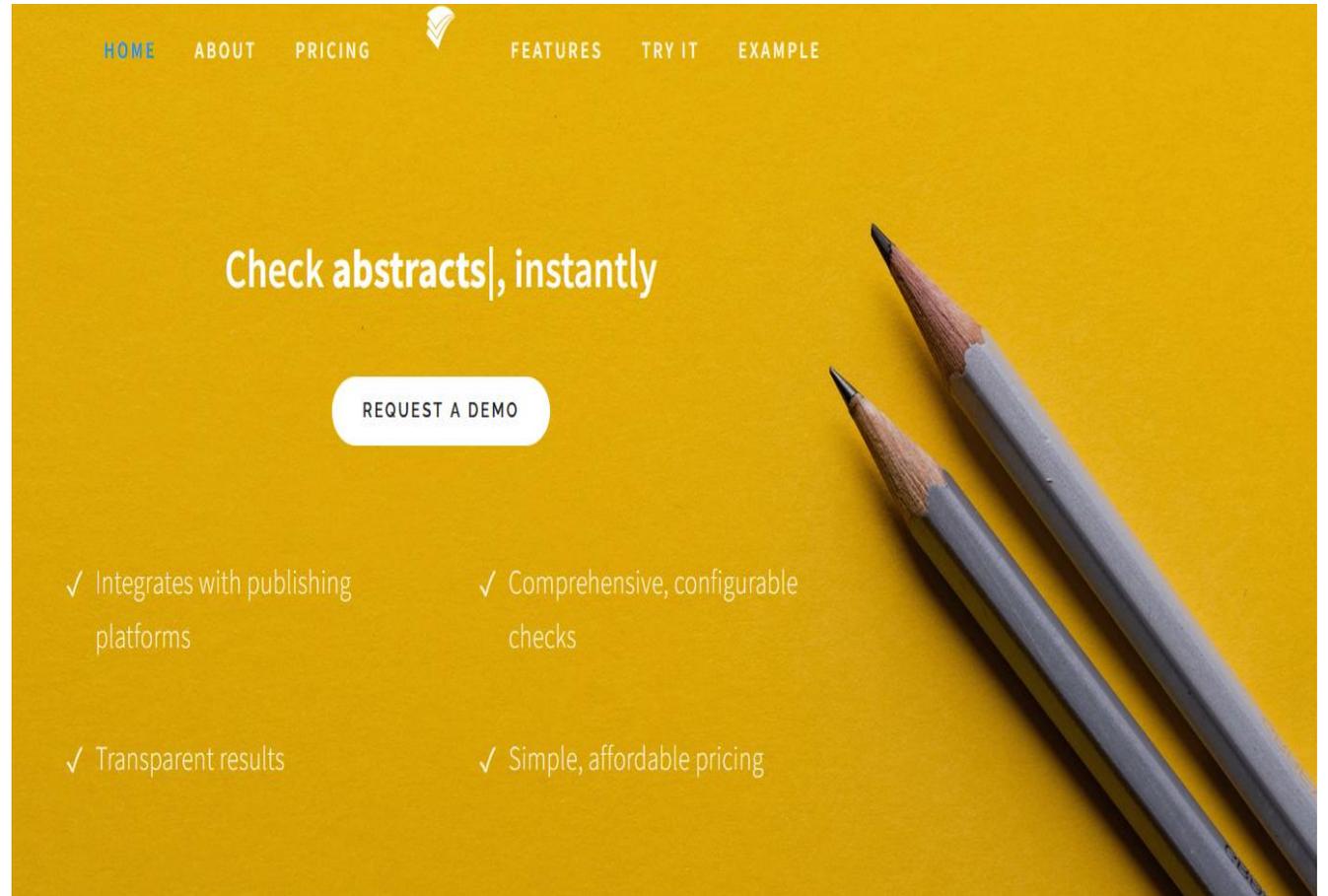
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# Penelope.ai

*Penelope.ai* is an online tool that automatically checks whether scientific manuscripts meet journal requirements



*I was very impressed - it was fantastic to have a product check references and match my manuscript to the journal requirements.*

*— Author submitting to Addiction, University of Cincinnati*

# Penelope.ai

The screenshot shows a web browser window with the URL <https://app.penelope.ai/submissions/demo/?role=author>. On the left, a checklist of requirements is displayed, with most items marked as complete (green checkmarks) and one as incomplete (red exclamation mark). The checklist items are:

- You have named a corresponding author. ✓  
Make sure you include their full name, postal address, e-mail and telephone number.
- You have included an email address. ✓
- You haven't used personal email addresses. ✓
- You have included Keywords. ✓
- Abstract**
- Your abstract must use the correct subheadings ❗
- Have you included an 'Objective' subsection in your abstract? ⚠️

On the right, the generated abstract is shown:

**Heterogeneous properties of central lateral and parafascicular thalamic synapses in the mouse striatum**

T. Ellender, J. Harwood\*, P. Kossilo\*, P. Bolam

\* contributed equally.

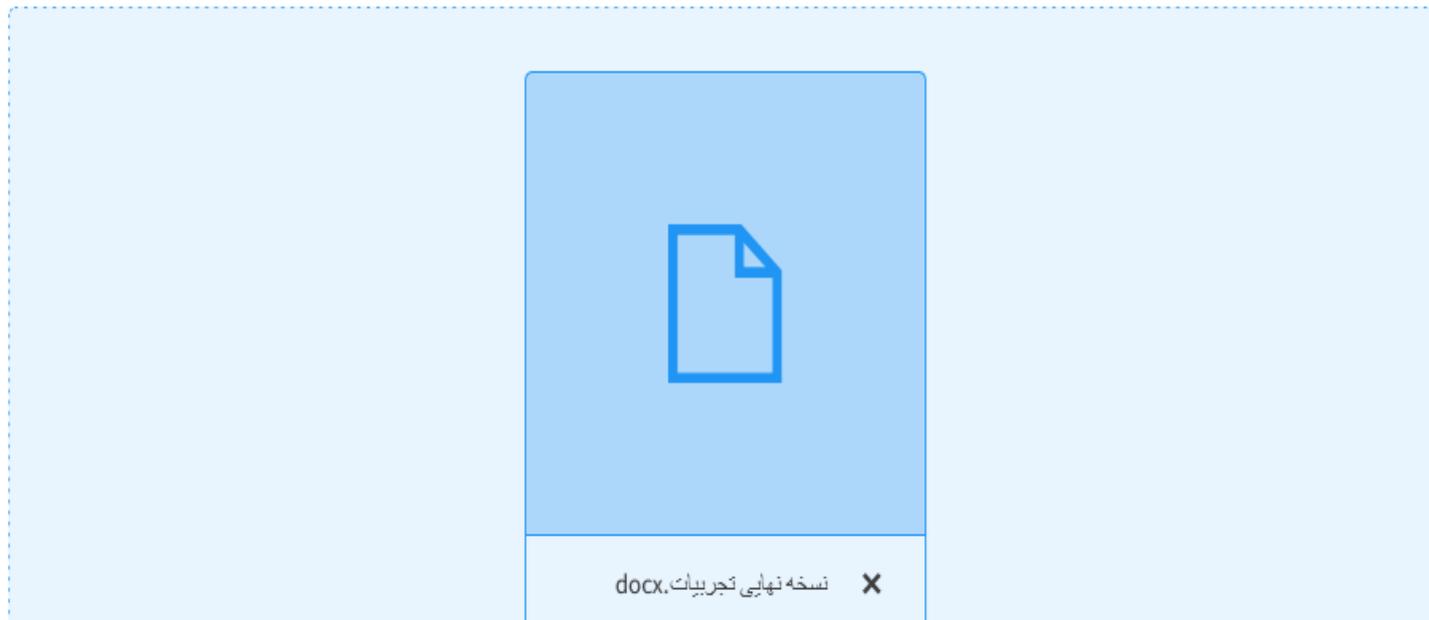
Anatomical Neuropharmacology Unit

**Keywords:** thalamus, striatum, intralaminar, parafascicular, central lateral

# Penelope.ai

1 → Upload your manuscript\*

DOCX files only please. Our auto-checking service cannot process DOC files or PDF.



# Penelope.ai

2 → What kind of article is this?

A Research

B Systematic review ✓

C Other

OK

# Penelope.ai

3 → What did you do a systematic review of?

A Observational studies

B Other

OK

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4 → Email\*

We will email feedback to you

[okhovatimaryam@gmail.com](mailto:okhovatimaryam@gmail.com)

**OK**

press **Enter** ↵

Thanks Maryam , we are all done!  
You will receive feedback by email in a few minutes.

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# Penelope.ai

Have you included a 'Study Selection' subsection in your abstract? 

## Main Headings

You have an introduction. 

Research articles should include a clear statement of the main study aims and major hypothesis/research question. Some journals require that research papers specify whether the study is confirmatory or exploratory.

You have included a methods section. 

Research articles should clearly describe the study design, research sample and the primary/secondary outcomes.

## Additional Headings

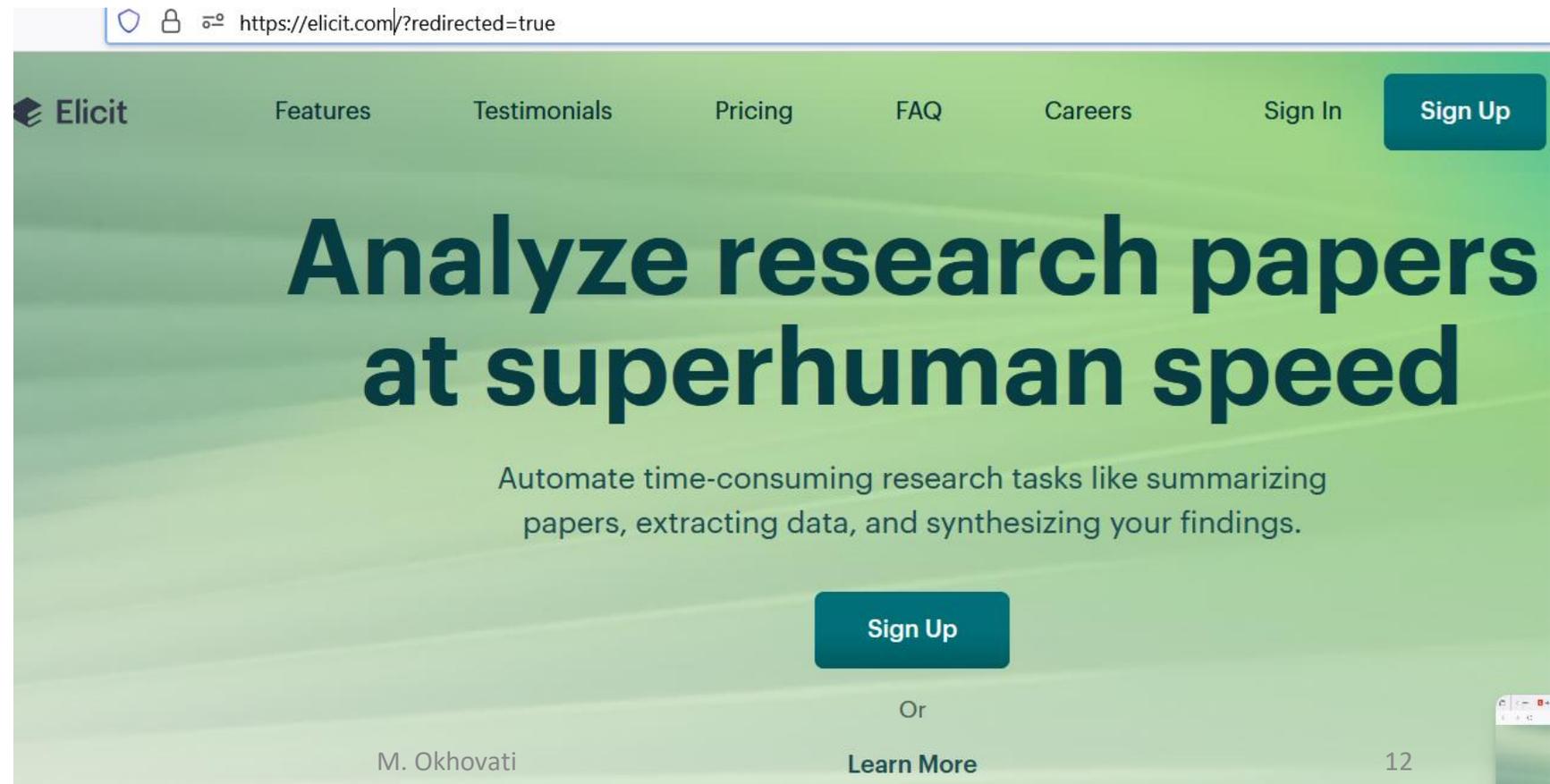
A systematic review on international experiences of health research systems: lessons and policy implications for Iran's health research system

**Introduction and objectives:** Developing and strengthening the health research systems at the national and regional levels has been widely approved by national governments and international health organizations. In this way, this study aimed at conducting a systematic review to investigate the international experiences of health research systems.

**Methodology:** To do this systematic review, three databases; Web of Science, Scopus and PubMed and two search engines, Google Scholar and Google, and the grey literature were also

# Elicit

Analyze research papers at superhuman speed. Automate time-consuming research tasks like summarizing papers, extracting data, and synthesizing your findings.



The screenshot shows the Elicit website homepage. The browser address bar displays "https://elicit.com/?redirected=true". The navigation menu includes "Elicit", "Features", "Testimonials", "Pricing", "FAQ", "Careers", "Sign In", and a "Sign Up" button. The main heading reads "Analyze research papers at superhuman speed". Below this, a subheading states "Automate time-consuming research tasks like summarizing papers, extracting data, and synthesizing your findings." A prominent "Sign Up" button is centered on the page. At the bottom, the text "M. Okhovati" is visible on the left, "Learn More" is in the center, and the number "12" is on the right.

https://elicit.com/?redirected=true

Elicit Features Testimonials Pricing FAQ Careers Sign In Sign Up

# Analyze research papers at superhuman speed

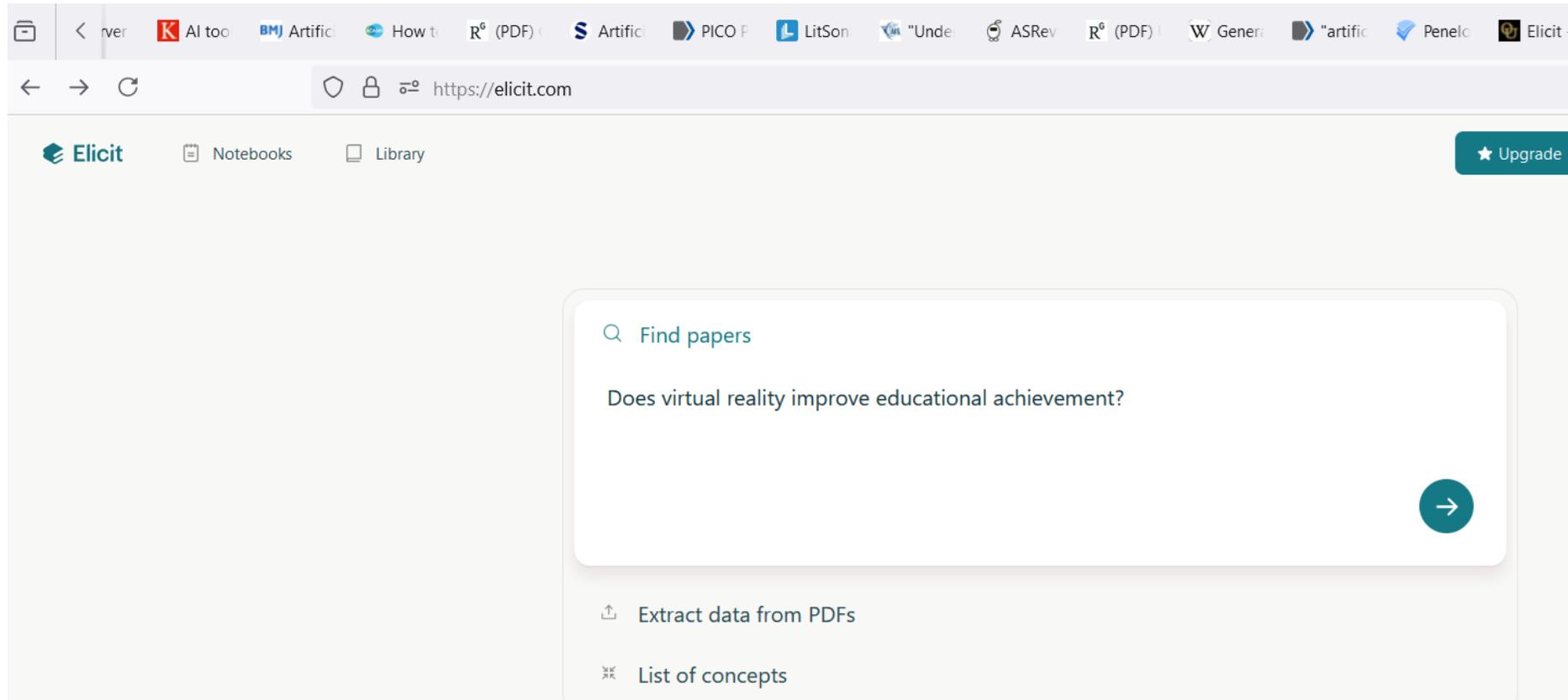
Automate time-consuming research tasks like summarizing papers, extracting data, and synthesizing your findings.

Sign Up

Or

M. Okhovati Learn More 12

# Elicit



# Elicit

## Enhancing Education through Virtual Reality

Q does virtual reality improve educational achievement

Summary of top 4 papers

Copy

Virtual reality (VR) technology has shown promising effects on educational achievement across multiple studies. A meta-analysis of desktop VR found it can effectively enhance students' academic performance, particularly in developing countries and high schools (Liu et al., 2024). Similarly, immersive VR environments demonstrated a moderate positive effect on academic achievement ( $d = 0.526$ ) according to another meta-analysis (Akgün & Atici, 2022). Specific studies have reported positive outcomes, such as increased academic achievement in mathematics for primary school students using an educational VR game (Akman & Çakır, 2020). VR technology has been noted to improve cognitive, affective, and psychomotor skills, increase motivation, and create a sense of presence and reality for students (Akgün & Atici, 2022). However, challenges like technical and health issues may arise during VR implementation (Akgün & Atici, 2022). To maximize VR's educational potential, researchers suggest developing appropriate VR scenarios and ensuring teacher preparedness (Peltekova et al., 2017).

Sort: Most relevant Filters Export as UPGRADE

Paper	Abstract summary
<p><input type="checkbox"/> Can desktop virtual reality effectively enhance academic achievement? —A meta-analysis</p> <p>Zhaoyang Liu +2</p> <p>Innovations in Education &amp; Teaching International M. Okhovati</p>	<p>Desktop virtual reality can effectively enhance students' academic achievement.</p> <p>Add new step</p>

# Writeful

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- Abstract Generator
- Title Generator



Writefull for Word

Writefull for Overleaf

Writefull Revise

Writefull Cite



Title Generator



Abstract Generator



Paraphraser



Academizer



Sentence Palette

## Academic writing is hard.

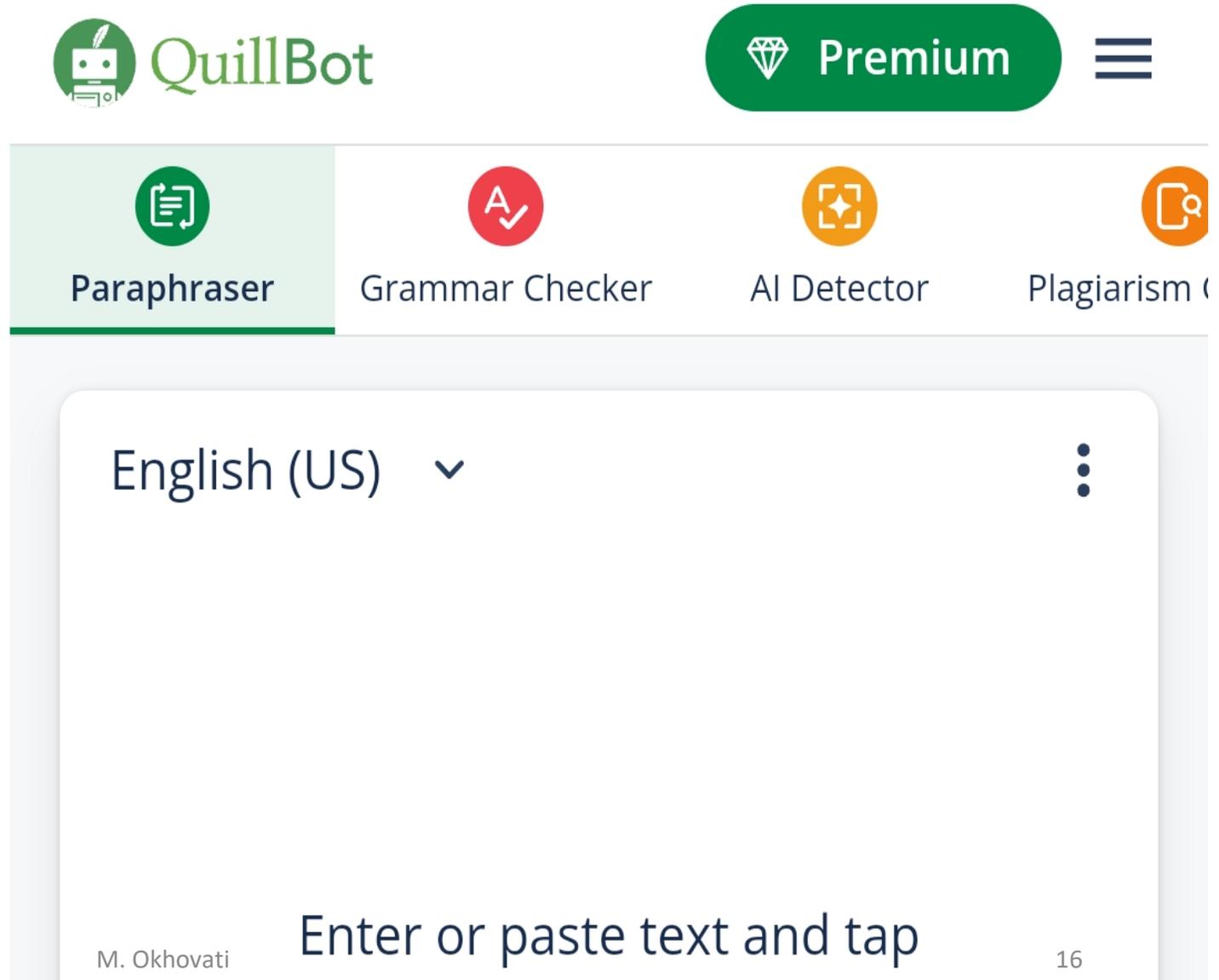
Writefull's AI helps you write, paraphrase, copyedit, and more.

Your software is **absolutely fantastic** and has been giving me a lot of help during my thesis writing! M. Okhovati

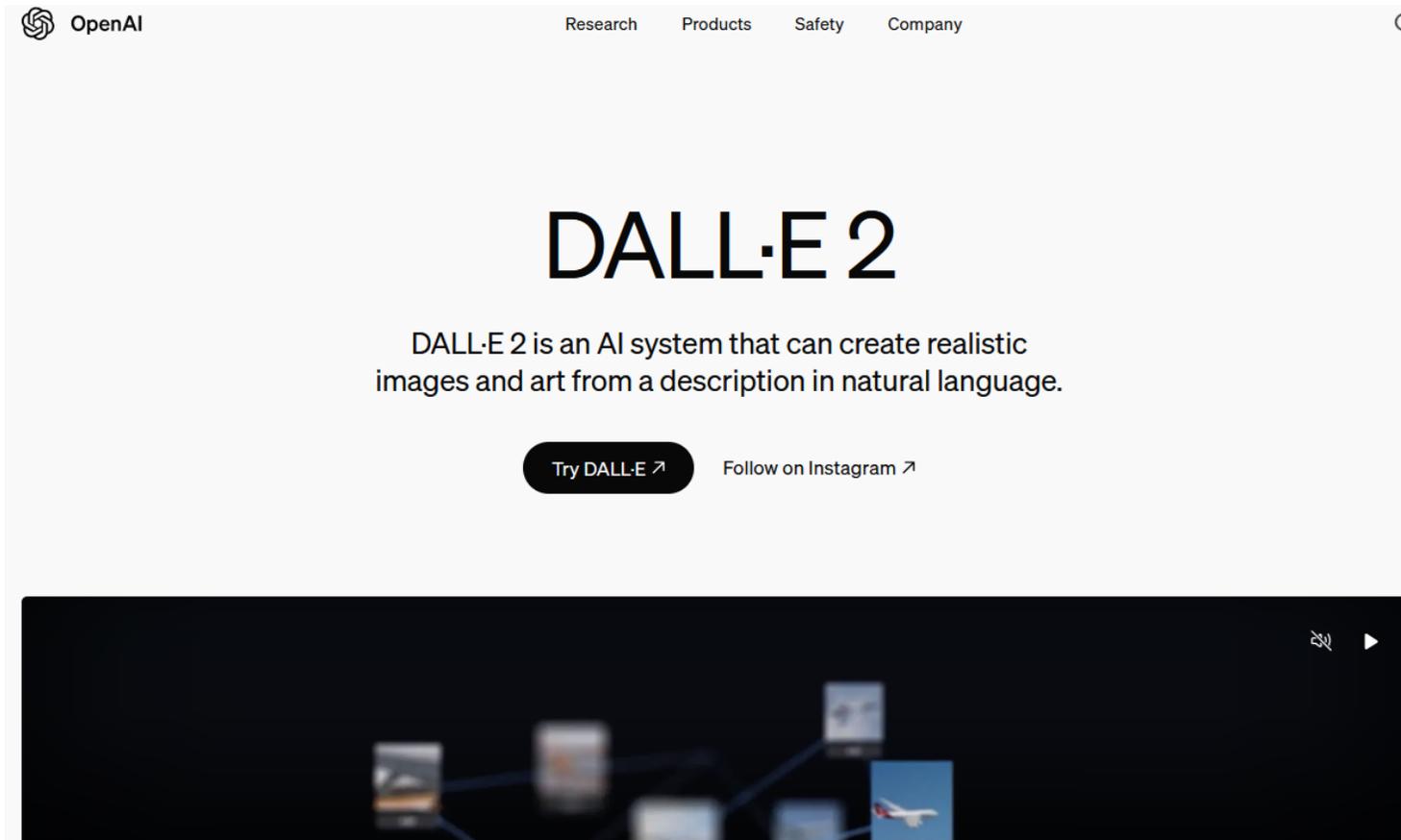
Sign in →

# Quillbot

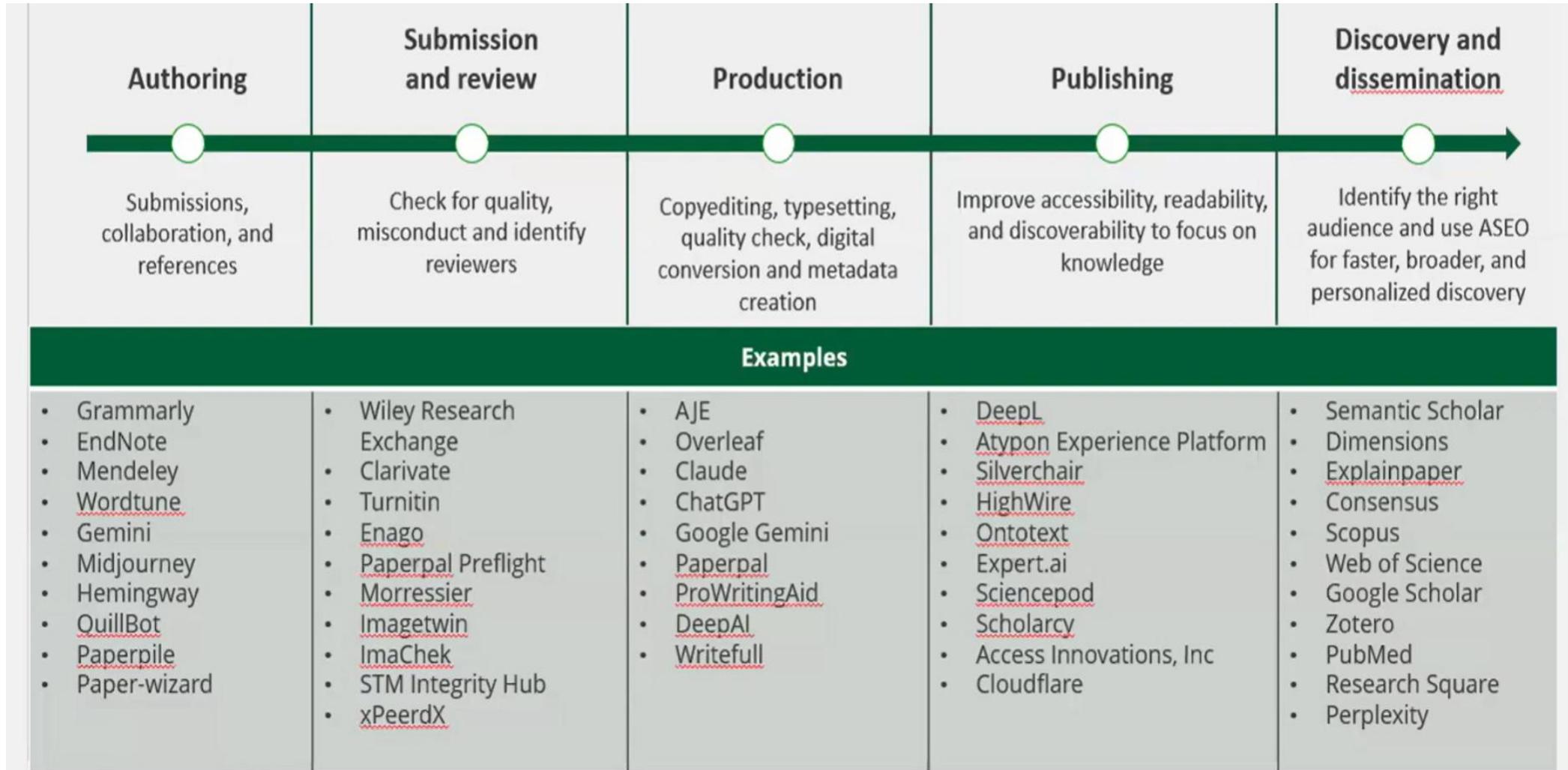
- Paraphraser, grammar checker, Citation Generator, Text summarizer and more.



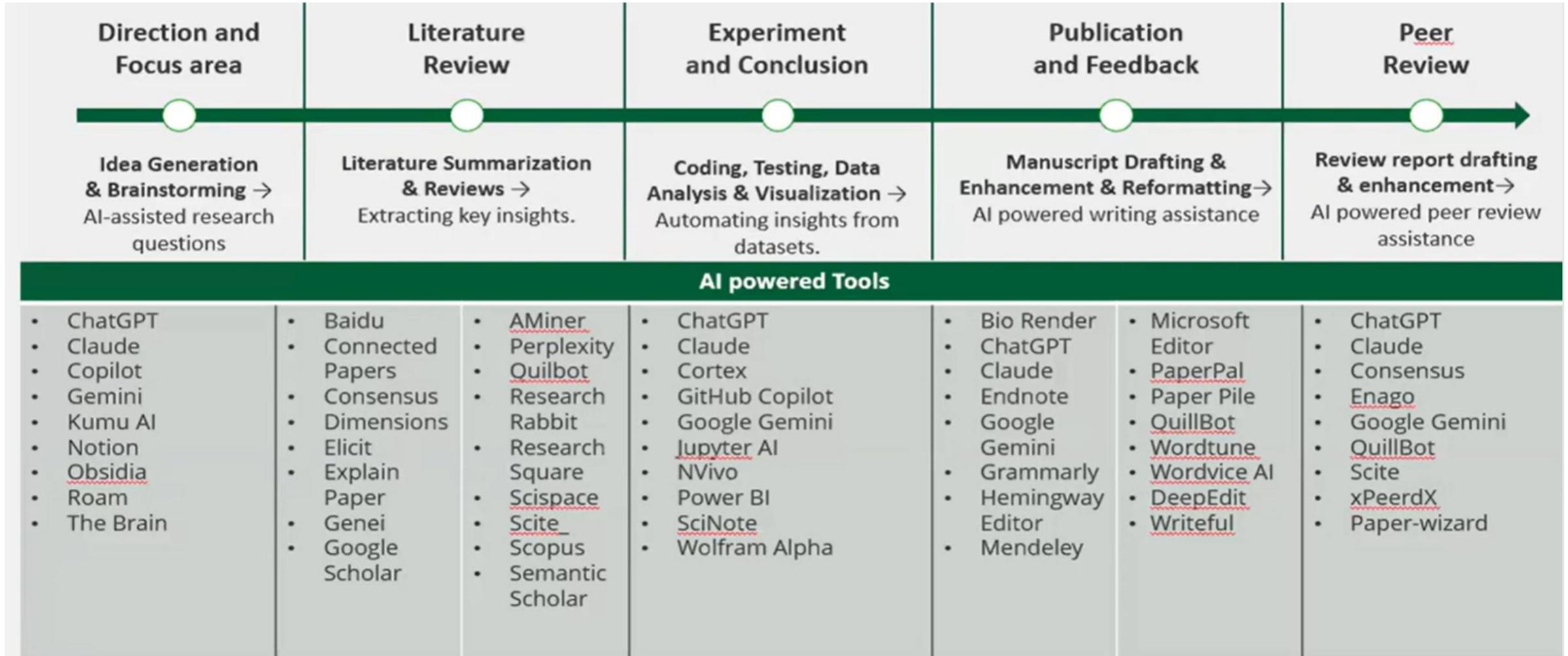
# DALL·E2



# AI tools used on the publishing



# AI tools used on the publishing



# Artificial Intelligence & Research Publishing

- ✓ continues to reshape the landscape of research publishing, offering powerful tools for authors, reviewers, and editors alike, while presenting unique ethical challenges. AI has transitioned swiftly from being an emerging curiosity to becoming an integral force in scholarly publishing.

# COPE

- The use of artificial intelligence (AI) tools such as ChatGPT or Large Language Models in research publications is expanding rapidly. COPE joins organizations, such as WAME and the JAMA Network among others, to state that AI tools cannot be listed as an author of a paper.
- AI tools cannot meet the requirements for authorship as they cannot take responsibility for the submitted work. As non-legal entities, they cannot assert the presence or absence of conflicts of interest nor manage copyright and license agreements.
- Authors who use AI tools in the writing of a manuscript, production of images or graphical elements of the paper, or in the collection and analysis of data, must be transparent in disclosing in the Materials and Methods (or similar section) of the paper how the AI tool was used and which tool was used. Authors are fully responsible for the content of their manuscript, even those parts produced by an AI tool, and are thus liable for any breach of publication ethics.

# WAME Recommendations on Chatbots and Generative Artificial Intelligence in Relation to Scholarly Publication

- A new recommendation (#4) has been added to the four original principal recommendations: **1) Only humans can be authors;** **2) Authors should acknowledge the sources of their materials;** **3) Authors must take public responsibility for their work;** **4) Editors and reviewers should specify, to authors and each other, any use of chatbots in evaluation of the manuscript and generation of reviews and correspondence;** and **5) Editors need appropriate digital tools to deal with the effects of chatbots on publishing.**
- In addition, this revision acknowledges that chatbots are used to perform different functions in scholarly publications. Currently, individuals in scholarly publishing may use chatbots for: **1) simple word-processing tasks (an extension of, word-processing and grammar-checking software),** **2) the generation of ideas and text,** and **3) substantive research.**

# WAME Recommendations on Chatbots and Generative Artificial Intelligence in Relation to Scholarly Publication

- WAME Recommendation **1**: Chatbots cannot be authors.
- WAME Recommendation **2**: Authors should be transparent when chatbots are used and provide information about how they were used.
- WAME Recommendations **2.1**: *Authors submitting a paper in which a chatbot/AI was used to draft new text should note such use in the acknowledgment; all prompts used to generate new text, or to convert text or text prompts into tables or illustrations, should be specified.*
- WAME Recommendation **2.2**: *When an AI tool such as a chatbot is used to carry out or generate analytical work, help report results (e.g., generating tables or figures), or write computer codes, this should be stated in the body of the paper, in both the Abstract and the Methods section. In the interests of enabling scientific scrutiny, including replication and identifying falsification, the full prompt used to generate the research results, the time and date of query, and the AI tool used and its version, should be provided.*

# WAME Recommendations on Chatbots and Generative Artificial Intelligence in Relation to Scholarly Publication

- WAME Recommendation **3**: *Authors are responsible for material provided by a chatbot in their paper (including the accuracy of what is presented and the absence of plagiarism) and for appropriate attribution of all sources (including original sources for material generated by the chatbot).*
- WAME Recommendation **4**: *Editors and peer reviewers should specify, to authors and each other, any use of chatbots in the evaluation of the manuscript and generation of reviews and correspondence. If they use chatbots in their communications with authors and each other, they should explain how they were used.*
- WAME Recommendation **5**: *Editors need appropriate tools to help them detect content generated or altered by AI. Such tools should be made available to editors regardless of ability to pay for them, for the good of science and the public, and to help ensure the integrity of healthcare information and reducing the risk of adverse health outcomes.*

# AI policies

- Journals and organizations are swiftly developing policies that ban inclusion of these nonhuman technologies as “authors” and that range from prohibiting the inclusion of AI-generated text in submitted work to requiring full transparency, responsibility, and accountability for how such tools are used and reported in scholarly publication.

# Nature

- Nature prohibits naming of such tools as a “credited author on a research paper” because “attribution of authorship carries with it accountability for the work, and AI tools cannot take such responsibility.” The policy also advises researchers who use these tools to document this use in the Methods or Acknowledgment sections of manuscripts.

# JAMA Network

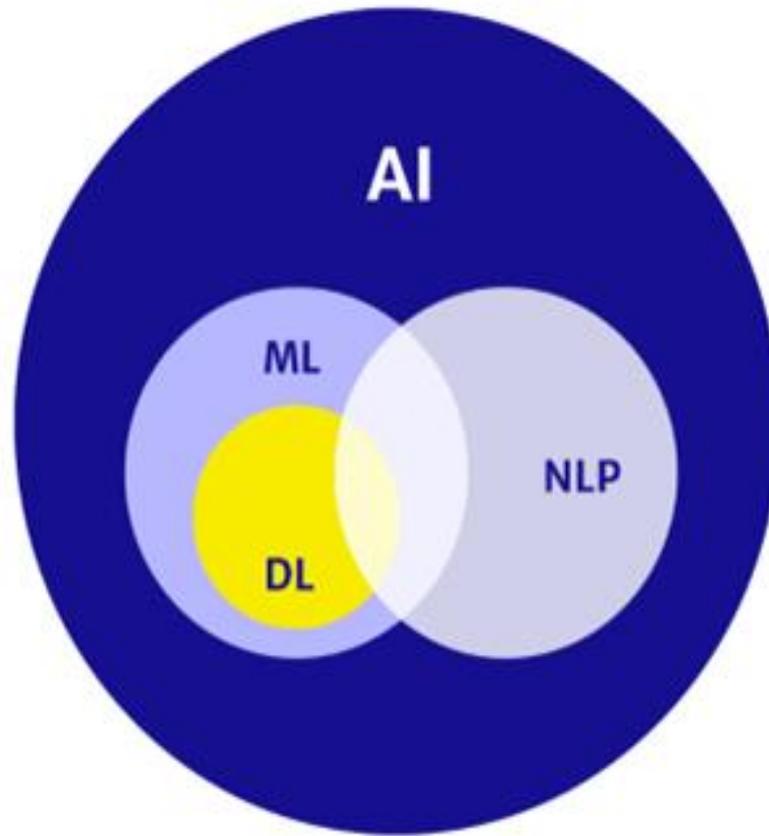
## **Author Responsibilities**

- Nonhuman artificial intelligence, language models, machine learning, or similar technologies do not qualify for authorship.
- If these models or tools are used to create content or assist with writing or manuscript preparation, authors must take responsibility for the integrity of the content generated by these tools. Authors should report the use of artificial intelligence, language models, machine learning, or similar technologies to create content or assist with writing or editing of manuscripts in the Acknowledgment section or the Methods section if this is part of formal research design or methods.
- This should include a description of the content that was created or edited and the name of the language model or tool, version and extension numbers, and manufacturer. (Note: this does not include basic tools for checking grammar, spelling, references, etc.)

# Artificial intelligence-generated content (AIGC)

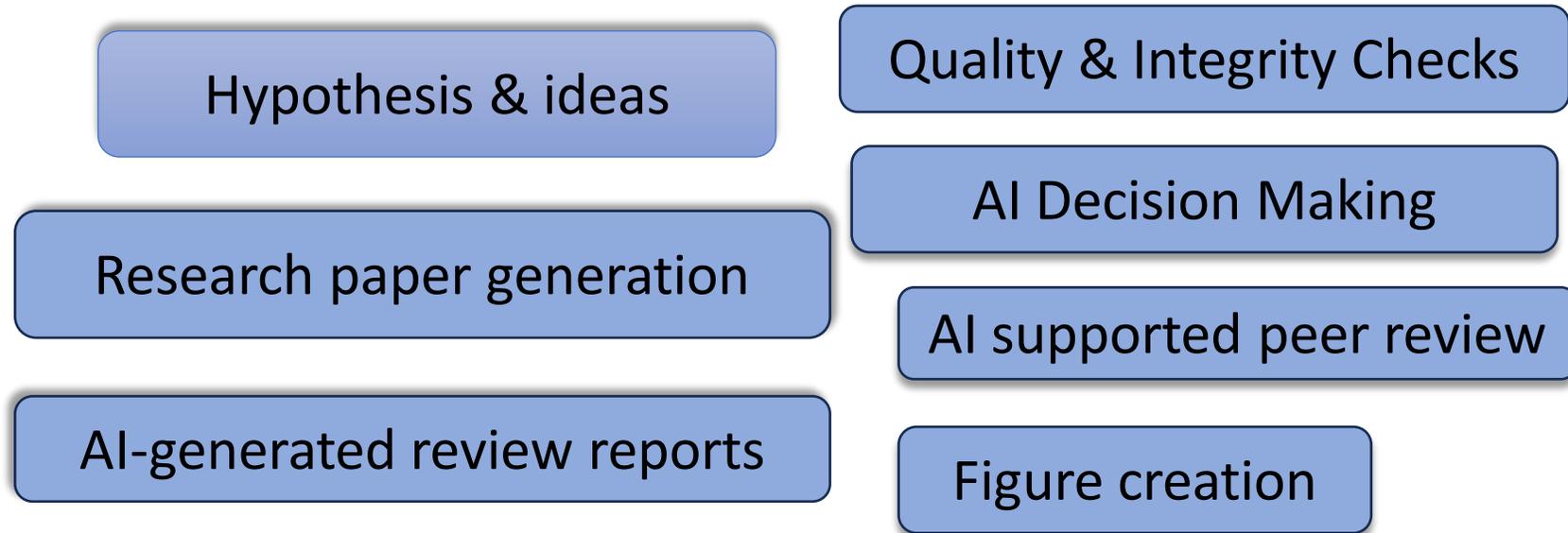
- ❑ AI-generated content is text, images, video, or audio content created by an artificial intelligence tool as a result of human input or prompts. You can produce AI-generated media using tools like OpenAI's ChatGPT and DALL-E, as well as AI-powered features inside content software like HubSpot and Canva.
- ❑ ***AI content usually lacks elements that human-generated content has, including human experience, point of view, creativity, nuance, and human quality control. It's more paint-by-numbers than an entirely new work.***

# How AI Generates Content

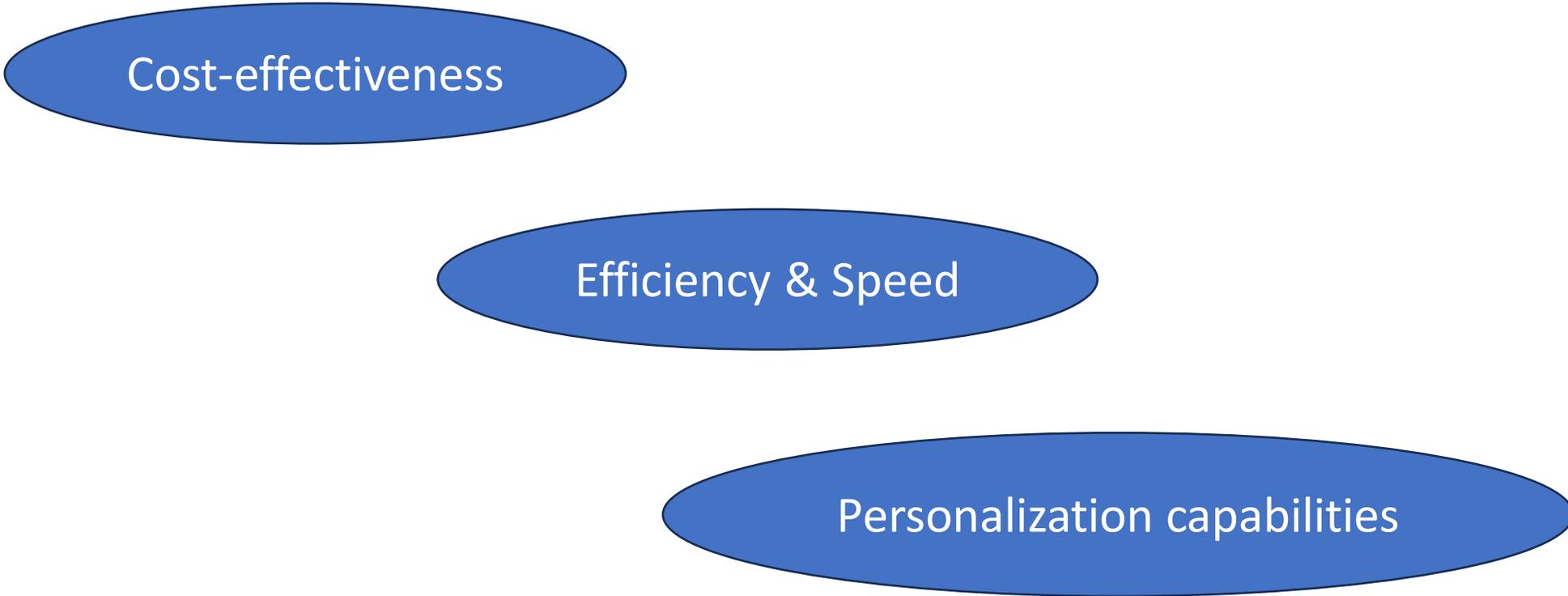


- **Artificial Intelligence (AI)**  
Technology that lets computers or machines simulate human decision-making and intelligence.
- **Machine Learning (ML)**  
The process of using data to teach computers to mimic human decision and generate output without being explicitly programmed to do so.
- **Natural Language Processing (NLP)**  
A computer's ability to understand written or spoken human language.
- **Deep Learning**  
A subfield of machine learning that simulates more complex decision-making and output.

# Artificial intelligence-generated content (AIGC)



# Benefits of AI-Generated Content



Cost-effectiveness

Efficiency & Speed

Personalization capabilities

# Limitations of AI-Generated Content

Quality Control

Reduced Engagement

Lack of creativity & Originality

Ethical Considerations

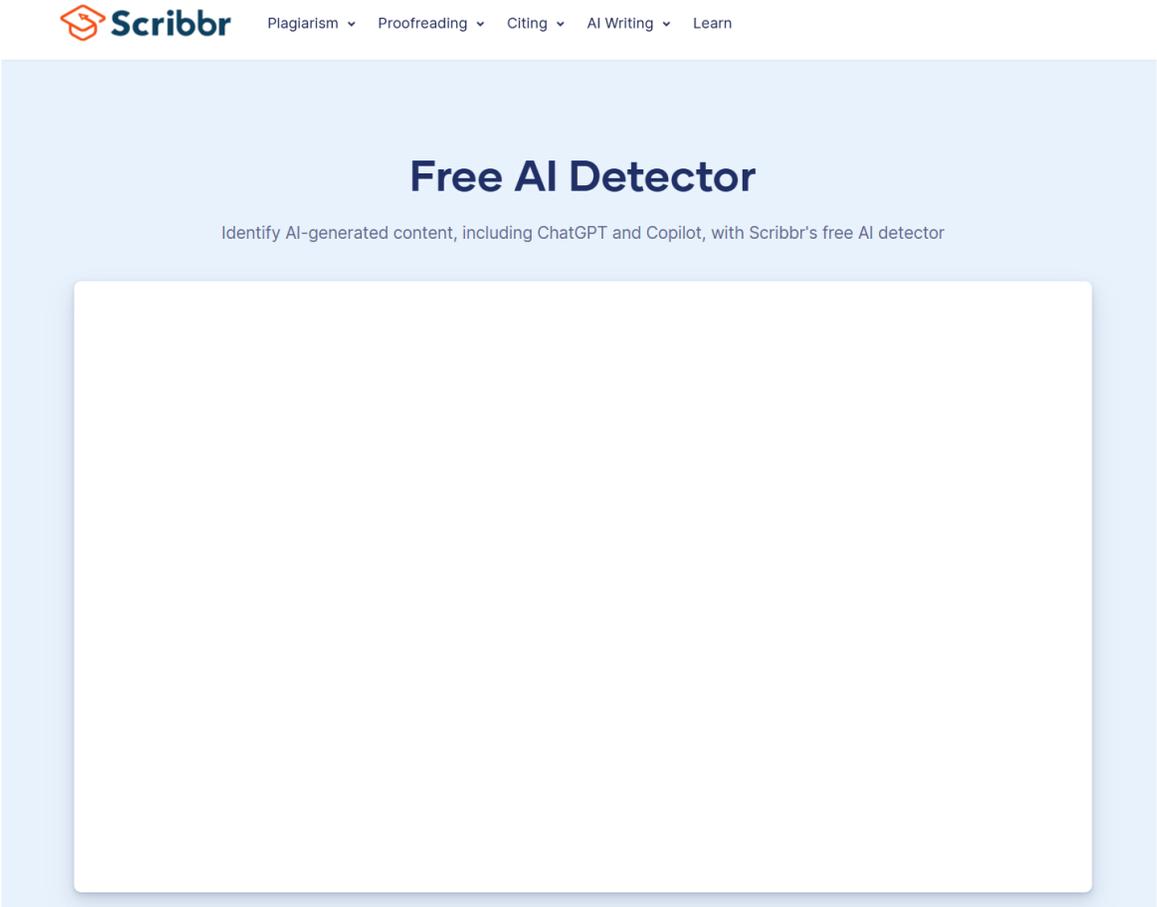
Bias & Discriminations

Job Displacement

# AI Detector

- Quillbot
- Scribbr
- PaperPal
- GPTZero
- ZeroGPT
- Writer
- Originality.ai
- Turnitin
- SciSpace
- ContentDetector.ai
- Grammarly
- PerfectEssayWriter
- Decopy AI
- Detecting-AI.com
- Copyleaks

# Scribbr



The image shows a screenshot of the Scribbr website's 'Free AI Detector' page. At the top left is the Scribbr logo, which consists of an orange graduation cap icon followed by the word 'Scribbr' in a bold, dark blue font. To the right of the logo is a horizontal navigation menu with the following items: 'Plagiarism', 'Proofreading', 'Citing', 'AI Writing', and 'Learn'. Each item has a small downward-pointing chevron icon next to it. Below the navigation menu is a light blue header section. In the center of this section, the text 'Free AI Detector' is displayed in a large, bold, dark blue font. Below this title, a smaller line of text reads: 'Identify AI-generated content, including ChatGPT and Copilot, with Scribbr's free AI detector'. The main body of the page is a large, empty white rectangular area with rounded corners, set against the light blue background.



### AI Essay Detector

Paste or upload your content for detecting AI generated text from ChatGPT, Bard, Gemini and other AI tools.

#### Content to Check AI\*

which are completed within a few hours. Test cricket is known for its strategic depth and endurance, while T20 cricket is recognized for its fast pace and entertainment value.

The cricket lightwood approach in disparate formats ranging from Test Igniters, which can last for up to five days, to individual Day internationals (odis) and Twenty20 format games (T20), which are completed in a couple of spans. Test cricket is known for its strategic depth and endurance, while T20 cricket is recognized for its fast pace and entertainment value.

The game's appeal lies in its blend of strategy, skill, and teamwork. Batsmen aim to score runs by hitting the ball to different parts of the field, while bowlers and fielders work together to limit scoring and dismiss the batsmen.

Clear inputs

Advanced Check

Detect AI

#### New Outputs

Clear



AI Generated



Human Written

Cricket matches come in different formats, ranging from Test matches, which can last up to five days, to One Day Internationals (ODIs) and Twenty20 (T20) games, which are completed within a few hours. Test cricket is known for its strategic depth and endurance, while T20 cricket is recognized for its fast pace and entertainment value.

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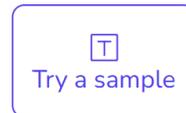
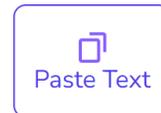
# Humanize AI: Free AI Humanizer

Make AI-generated writing sound more natural and engaging with Grammarly's AI humanizer, designed by language experts.

<p>Type, paste, or upload your text.</p> <p><a href="#">Humanize</a> <a href="#">Upload file</a> <a href="#">Try sample text</a></p> <p>0/1500 words</p>	<h2> Humanized text</h2> <p></p> <p>Add your text and click Humanize to see results here</p>
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# Superior AI Humanizer to Humanize AI Text

Humanize AI transforms AI content into natural, human-like writing that bypasses all AI detection. Our advanced AI humanizer ensures perfect authenticity while preserving your message. Try it now!



0/200

Humanize AI is be ready...

Basic

Autopilot



Balance ▾

General ▾

 Humanize AI Text

# The disadvantages of AI-generated content

- Lack of Contextual Understanding
- Overuse of Repetitive Phrases
- Incorrect or Outdated Information
- Lack of Creativity and Originality
- Poor Understanding of Reader Intent

# Humanizing AI content

- making AI-generated text sound like it was shaped by someone who understands the audience, respecting their emotions and background.

# Allowing AI co-authors is a disregard for humanization

## Accountability in Research

- First, allowing AI to be a coauthor disregards the uniquely human experience of writing texts. This means that human authors are seen as mere producers of texts rather than rational beings engaged in a value-added and humanized learning process expressed through the paper. The relationship between the human author and the thesis is reduced to a mere result of generation rather than a result of individual human critical thinking. Second, allowing AI to be a coauthor leads to self-delusion about one's own rationality and thus violates the responsibility to understand the world correctly. In this process of self-deception, it is not as if those who grant AI coauthor status do not realize that AI is not the same as humans; however, they self-deceivingly assume that AI has the same internal state as humans. This means that the relationship between the author and the work is no longer seen as a position to be respected, but as something probabilistic and gamified.



با تشکر از توجه شما

