

Critical AI literacy

for Artificial Intelligence students

Welcome!

Welcome!

You haven't chosen the **Bachelor Artificial Intelligence**.

Excellent choice!

Having **academic experts** in AI is important for science and society, and now more than ever.

Why do you think this is?



Let's discuss

Welcome!

Studying **Artificial Intelligence** (also) involves:

1. **unlearning** preconceived ideas about what 'AI' is (you probably have experiences interacting with what companies call 'AI')
2. learning **scientifically sound** ways of **reasoning** about AI in science and society, for different meanings of 'AI'.

Welcome!

The more you learn about **Artificial Intelligence** :

- the more you will develop **scientific knowledge**,
- the more you will be able to **recognise misinformation**, and
- the better you can help **improve science and society**.

AI slop and the destruction of knowledge



Iris van Rooij 
@irisvanrooij.bsky.social

Was looking into what Cognitive Scientists mean by 'domain-general' cognition, and then hit upon this. This is definitely NOT how we use that term.

Tip: read the last sentence to understand what went wrong here.

Sigh.

Domain-General Cognitive Ability

In subject area: [Psychology](#)

Domain-general cognitive abilities refer to cognitive skills that are not unique to humans but are present across various primate species and potentially other mammals and birds, indicating a general factor underlying cognitive performance that correlates with brain size and is associated with selective attention and working memory capacity.

AI generated definition based on: [Trends in Cognitive Sciences, 2012](#)

ALT

What do you think is wrong with this definition?

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Hard to spot for **novices**.

Easy to spot for **experts**.

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Here responses from experts:



Mike "looking for resea... @mikec... · 1d
Oof



Iris van Rooij  @irisvanro... · 4d

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Olivia Guest · Ολίβια Γ... @olivia.s... · 2d
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Here responses from experts:



Giosuè Baggio @giosuebaggio.bs... · 4d

Imagine this at scale, unchecked: how is this not a fundamental threat to science?

(Also, this is a perfect example of how irrational and ironic it is for large publishing companies to use "AI" to generate content that is of a much lower quality than the human-created content they already own.)

 **Iris van Rooij**  @irisvanro... · 4d

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Esther Mondragón @emp1.bsky.s... · 4d

Expect this new "view" from now on in most students' (and not only students') documents. AI is redefining terms and its capability to render its "definitions" on a great scale will guarantee its prevalence. Allow me to relabel AI too: a gigantic machinery to spread crap. If only relabelling work!

 **Iris van Rooij**  @irisvanro... · 4d

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Dr Reshanne Reeder @kerblooee.... · 3d

The words that signal the collapse of human knowledge:

"Would you like an AI summary of this work?"

 **Iris van Rooij**  @irisvanro... · 4d

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Here responses from experts:



Jeff Greene ✓ @jeffgreene.bsky.s... · 4d

Yet another example of why I say that, at the moment, GenAI is most useful for experts in their area of expertise. Experts can spot deviances (I refuse to call them hallucinations) that everybody else cannot.

 **Iris van Rooij** ■ @irisvanro... · 4d

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savithry @savithry.bsky.social · 2d

last fall ~20/70 of my language development students described domain-general in exactly this weird way, and reading it again now is making my brain angry-swim all over again

(cmd+F in the slides or the reading would've gotten them the answer; my fabulous GSI knew immediately it was bc of LLM use)

 **Iris van Rooij** ■ @irisvanro... · 4d

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Dr. K @drkamikaze.bsky.social · 4d

A concrete example of what I mean when I say AI cannot summarize.

You actually have to be able to read and comprehend something before you can take the active step of interpreting it to summarize.

AI cannot read, comprehend, or interpret.

 **Iris van Rooij** ■ @irisvanro... · 4d

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Instantly surface, cite, compare and explore trusted evidence from deep within peer-reviewed literature with ScienceDirect AI.

Explore ScienceDirect AI ↗

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Explore ScienceDirect AI 

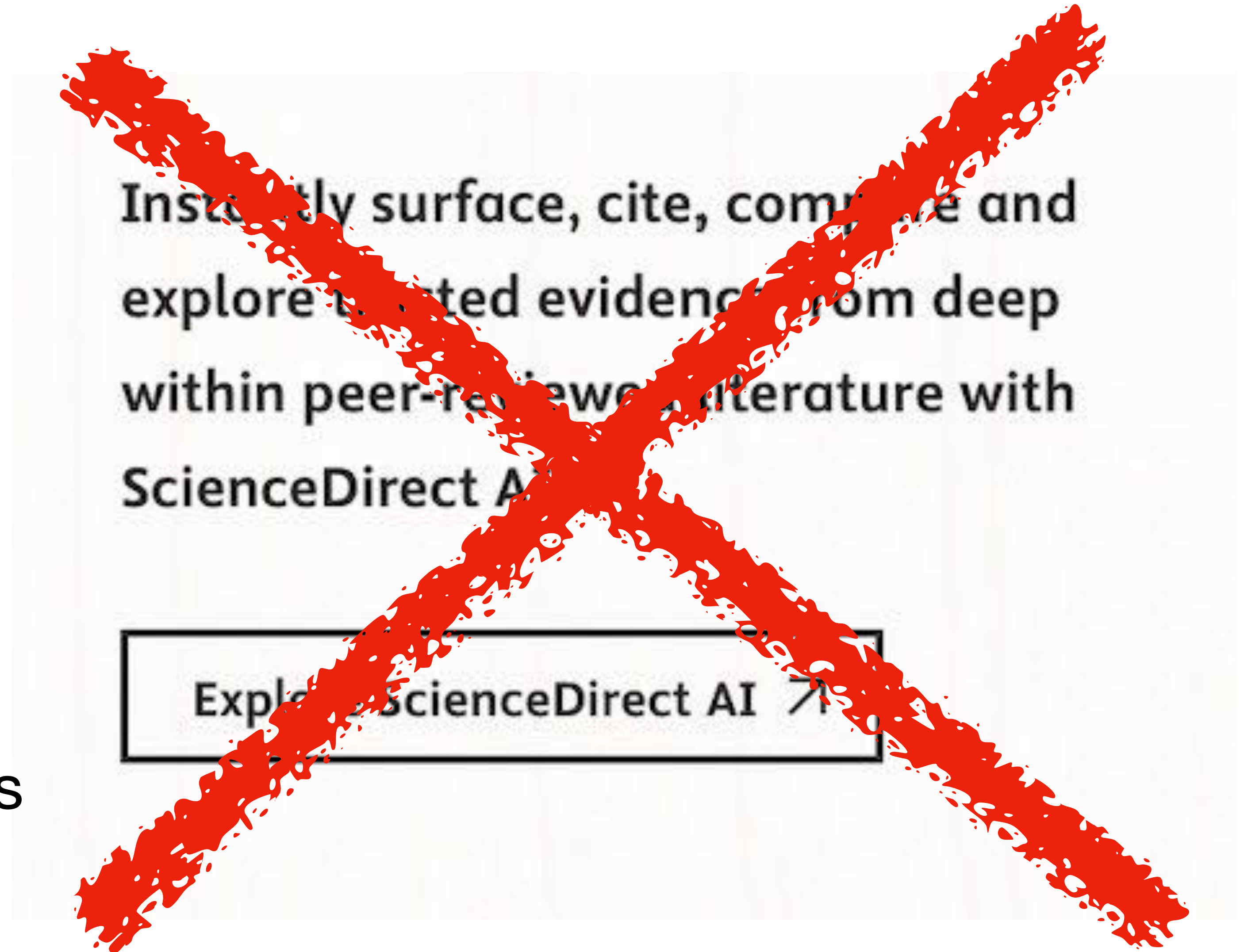
AI slop and the destruction of knowledge

In the **Artificial Intelligence** program you read, write, and think for yourself.

Resist unduly off-loading cognitive labor.

Recommended reading:

Guest, Olivia (2025). What does 'human-centred AI' mean?



AI slop and the destruction of knowledge

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Guest, O. What Does ‘Human-Centred AI’ Mean? Behav. Sci. 2026, 16, 583. <https://doi.org/10.3390/bs16040583>

1) Discern relationship:

- a) *entities involved*
- b) *potential terms*

Does the artefact relate to cognitive labour?

MACHINE		HUMAN
algorithm, artificial, automation, benchmark, discriminative, computer, engineering, functional, generative, mechanism, system, technology, tool	AI	ability, behaviour, capacity, cognition, intelligence, labour, learn, organism, professional, psychology, reason, skill, task, thought, train

2) Characterise relationship:

- a) *label*
- b) *valence*
- c) *effect on cognition*
- d) *labour obfuscation*
- e) *human equivalence*
- f) *human-in-the-loop*
- g) *human input*
- h) *desired output*

How does the artefact relate to cognitive labour?

REPLACEMENT	ENHANCEMENT	DISPLACEMENT
neutral	beneficial	harmful
unaffected	reskilling	deskilling
minimal	possible	maximal
worse or same	different	no
rare	possible	common
transparent	transparent	opaque
specified	formal	unspecified

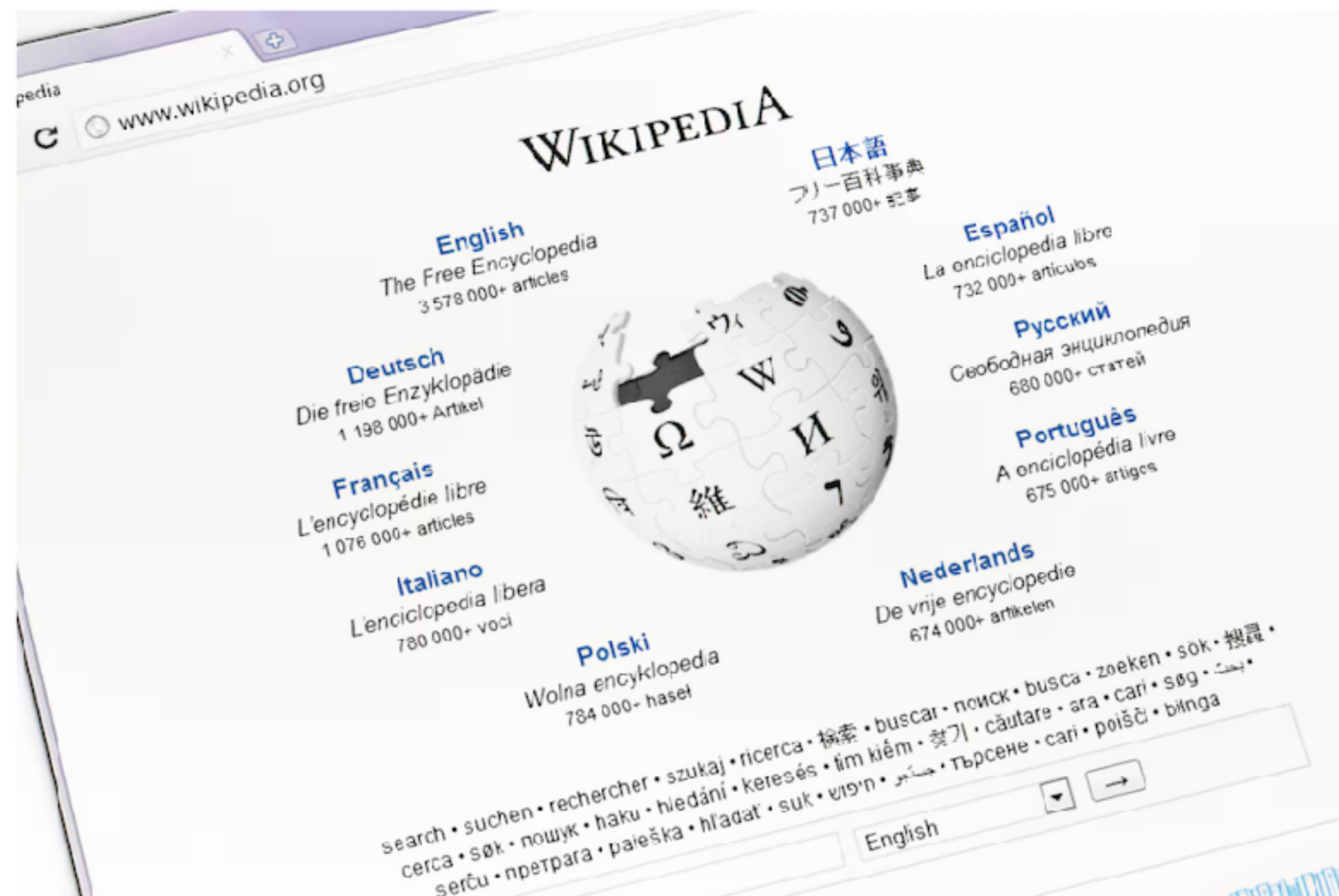
More AI slop and the destruction of knowledge

Volunteers fight to keep 'AI slop' off Wikipedia

Hundreds of Wikipedia articles may contain AI-generated errors. Editors are working around the clock to stamp them out.

49 minutes ago

🔊 5 min ✂ Summary ➦ 📌 🗒



Wikipedia volunteers are scouring the online encyclopedia's pages to root out artificial intelligence-created content. (iStock)

LLMs are not intelligent

OpenAI claims GPT-5 model boosts ChatGPT to 'PhD level'

2 days ago

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Lily Jamali

North America Technology correspondent

Liv McMahon

Technology reporter



Vs.



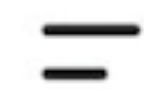
Xondra M. Gálvez Morakis · 2nd

Sworn Translator (ES<>EN) of legal, official, and personal d...

23h · 🌐

[+ Follow](#)

The word count is correct, but the reasoning is all messed up.



ChatGPT 5 >



How many A's are there in Sandra?

The name **Sandra** has **two A's** — one at the start and one before the last letter.

