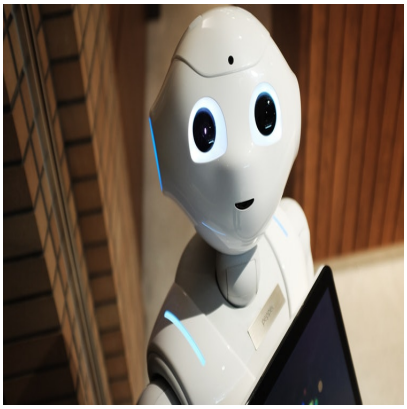


Description

Is there a place for Artificial Intelligence (AI) in scholarly publishing? What if it could streamline literature searches or help us to understand a journal article? There are so many publications that it is no wonder that researchers often struggle with information overflow. Moreover, academic publishers have found that researchers often leave their platform to look up a term or definition that they don't understand in the journal article that they are reading. It could take time to find a source that is reliable. Wouldn't it be useful to be able to get more information, that you can trust, right there on the publisher's platform?

"I have a hard time thinking of an industry that I don't think AI will transform in the next several years." — Andrew Ng

Artificial Intelligence is Streamlining Research

Publishers have already started looking at ways to improve your research. After moving all their content into a digital format, Elsevier realized that they had created a database of machine-readable literature. It opened up a huge number of possibilities such as tracking research in a given field, evaluating the performance of institutions and researchers, and helping many fields improve their work. Here are some of the ways AI has improved your research experience:

Learn & Accelerate Research on COVID-19

This tool seems to be extremely relevant with the current global pandemic crisis. Clara (or COVID-19 Learning and Research Accelerator) is a free AI tool that helps you to find the latest and most relevant Covid-19 research including clinical trials. Clara aims to save time in the fight against the current corona virus pandemic by helping researchers find vital information quickly and easily, all in one place. It is a combined effort by publishers who have made all COVID research open and free.

Gather Information About a New Topic

These contain a snapshot of terms, definitions and excerpts obtained from Elsevier's books. This can help you get up to speed with a new topic quickly from a trusted source. You can access the ScienceDirect Topic pages directly by searching for them, or they can be accessed via hyperlinks in

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journal articles.

Know About Hot Topics of Research

Elsevier publishes a list of hot research topics by analyzing publication content. Knowing which fields are active and gaining momentum can help you understand which fields are well-funded; who the top performing researchers (and upcoming researchers) in those fields are; identify leading institutions in a particular field; and identify peers and competitors.

Excel in Technical Writing & Improve the Manuscript

Trinka is an AI-tool that checks not only your spelling and grammar, but also your scientific tone and style. It even takes style guide preferences into account. Trinka bases its suggestions on the best written papers in every subject and this enables it to find difficult errors unique to academic writing.

Review Massive Collections of Research Papers & Patents

Iris.ai helps you sift through vast collections of research papers or patents. Iris.ai is a tool that uses Natural Language Processing to help you find the right documents, extract the key data and identify the information you are looking for.

Iris bases its search on a paper of your choice. It then “fingerprints” key aspects of the paper such as keywords, their synonyms and other words or phrases that fall into the broader meaning of these keywords. This is great if you’re starting a new project and are unfamiliar with the terminology and keywords. Next it calculates how close these sets of words are, using statistical analysis. The fingerprints created are then used for document fingerprint indexing. Iris.ai creates a visual map of the literature for you which you can use to narrow down your reading list. This time saving tool will help you understand connections between the research much faster as well as increase your chances of interdisciplinary discovery.

Distinguish Relevant Citations

Have you been wondering whether a paper’s citations are relevant? Scite.ai can classify citations by context and tell you whether they support or contradict the cited claim. This provides valuable information that could be used to complement the calculation of the impact factor.

Is Artificial Intelligence the Way Forward?

It seems that AI is the way of the future and will make us all more efficient researchers. In fact, it is necessary, given the ever increasing amount of data that is being published and that will need to be analysed in order to advance science and make decisions. It is going to be exciting to see the innovations that AI will make possible. However, is it all good?

Suzanne Fricke, an animal-health librarian at Washington State University in Pullman warns that AI tools are expensive. They are also limited to the databases that they use to search the literature. She cautions us to not solely rely on such a tool.

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David Smith (Head of Product Solutions at the Institution of Engineering and Technology) warns that research articles are often not a very good source materials for AI. Journal articles have been written for humans to read and understand, and are not structured enough for a machine to extract important information. Moreover, often there are errors in the data. This need addressing soon.

If you are wondering whether there will be any work left for human researchers, the answer is yes. At present, AI is unable to develop a research hypothesis. In addition, AI is only as good as the data a human gives it to work with. Unintentional human bias can still creep in because certain questions or keywords may be omitted, simply because a certain population might not consider what another one would.

Artificial Intelligence – A New Team Member

I don't see a future without AI in scholarly publishing. AI-based tools are necessary to help scientists navigate and analyze the huge amount of literature published each year. The possibilities are endless. The publishing community will be able to offer so much more than a database of scientific literature.

AI has already made its way into the writing space of authors in the form of Trinka. Trinka is world's first grammar checker and language enhancement tool custom-built for technical writing. Its AI-powered assistance corrects your writing for technical spellings, formal tone, sentence structure, conciseness and much more. Not to forget its subject-specific expert suggestions and adherence to style guide preferences. Such AI intervention can indeed help authors worry less about getting their manuscript publication ready and focus more on their ideas!

In any case, however, the input and algorithms are crucial since a machine can only work with what it is given. Therefore, I don't see AI taking over, I see it as a new member of the research community. What do you think? Let us know in the comments section below.

Category

1. Manuscript Preparation
2. Publishing Research

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2020/05/30
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