

Scite

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Summary

Scite is a [literature search tool](#) that integrates [artificial intelligence](#) to help develop search queries and [provide contextual information about citations](#). It also provides [visual](#) and textual summaries of literature. Northeastern University has a subscription to Scite. If you are associated with Northeastern, you can [login using your university email and credentials](#) to access Scite's more advanced features.

This handout provides a quick guide to Scite's primary capabilities. The influence of AI and the range of its capabilities is rapidly changing, so please be aware that any information provided here should be taken in tandem with your current knowledge of these subjects. Please also note that you should follow your professor's stated guidelines for AI use in your class. For more information on Northeastern University AI policies as well as AI tutorials and tips, visit the [Northeastern Center for Advancing Teaching and Learning Through Research](#).

AI Ethics

AI ethics are a large and complex topic. Before you use an AI tool, consider how it derives information, what/whom its sources are, what information it is privileging or leaving out, and which resources are depleted and communities harmed in its development and use. For more information on AI ethics and bias as they pertain to literature reviews, please see our [AI for Literature Reviews slides](#).

Strengths and Weaknesses

Scite may be helpful for performing an initial literature search, however, we do not recommend relying on it exclusively due to its relatively [small database and potential classification errors](#). Below are some [key strengths and weaknesses](#) of Scite (primarily sourced from [Scite.ai Guide](#) by the Florida State University Libraries).

Strengths

- In addition to displaying how many times an article was cited by other articles, Scite also uses an [AI model to classify the citations](#) into supporting, mentioning, and contrasting citation types (sometimes with limited accuracy, see weaknesses). This could help provide an initial understanding of how the article relates to the broader literature.
- Scite uses large language models (such as Claude or GPT) to turn natural language questions into structured queries with keywords. Users can then edit these queries to refine their search.
- The [dashboard feature](#) can be used to track research evolution.
- Scite reports [if an article has been retracted](#).
- Scite includes a [browser extension](#) for searching academic articles related to text found online.

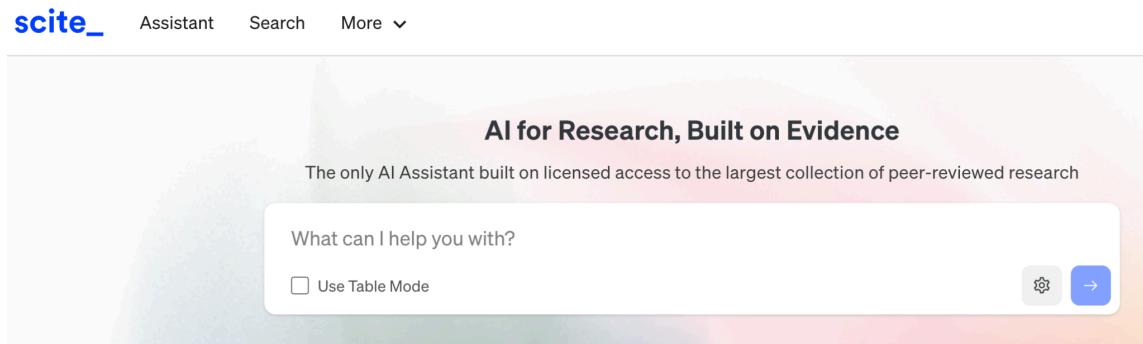
Weaknesses

- The database supporting Scite is relatively small compared to other literature [databases](#) and may not have good coverage of [social sciences](#) and [humanities](#) topics, and may exclude non-academic article sources such as books.
- Citation types may be [misclassified](#) and the overall citation counts may be lower than the actual number of citations an article received.
- Results may include irrelevant sources.
- The dashboard feature does not always function reliably.

Using Scite

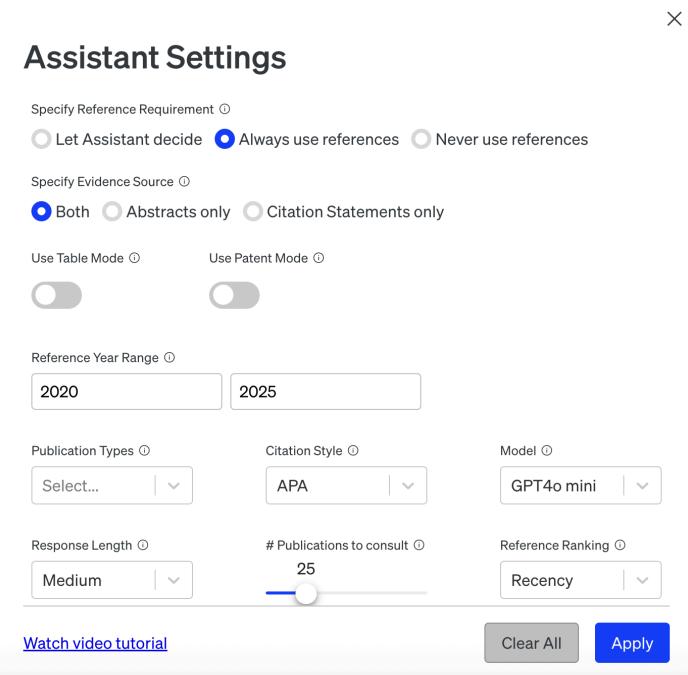
When [using Scite for a literature search](#) it is important to adjust the assistant settings, review and potentially refine the search terms, and double check the results with [other sources](#).

1. When you go to <https://scite.ai/> you will see a prompt box, similar to ChatGPT or Claude. To change the assistant settings, click the gear icon in the lower left corner of the box.



Caption: Scite landing page, including text box for prompt.

Once you have the assistant settings open, adjust the settings to align with your search goals. You may be able to improve the quality of the results by changing the reference requirement to Always use references, [specifying the year range](#), and selecting your preferred reference ranking. To minimize the environmental impact of your prompt, you can also select a smaller model, such as GPT4o mini. However, regardless of model, ethical implications of AI remain.



Caption: Assistant Settings menu

- After you have adjusted the settings, enter your prompt and click the arrow in the lower right corner to run the prompt. If you receive an error, try changing the model you are using. Once you have the result, navigate to the Search Strategy panel on the right and review the search terms. If necessary, click Edit Searches to refine the search terms and gather more relevant results.

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The screenshot shows a search interface with a sidebar and a main content area. The sidebar includes a 'References' section and a 'Search Strategy' section. The 'Searches Used' section contains three search queries:

- ("fairness in machine learning" OR "fairness in AI" OR "equity in AI") AND (method OR framework OR approach OR model) AND (taxonomy OR taxonomy* OR survey OR review)
- ("bias" NEAR/3 "artificial intelligence" OR "bias" NEAR/3 "AI" OR "algorithmic bias") AND (ethics OR fairness OR discrimination OR equity) AND (practice OR impact OR evaluation OR measurement)
- ("algorithmic bias" OR "statistical bias" OR "data bias" OR "sampling bias" OR "representation bias") AND (AI OR "artificial intelligence" OR "machine learning" OR "deep learning") AND (detection OR mitigation OR reduction OR evaluation)

The main content area displays search results for 'Bias in AI'. One result is expanded, showing text about bias in AI systems and its societal implications. A note indicates that custom assistant settings are being used for this session.

Caption: Assistant results

- To view the citation summary information for the returned articles, scroll to the end of the response and click Add references to dashboard, then select Add to new dashboard or Add to existing dashboard, then click View. The top of the dashboard will contain summary information, potentially including visualizations. Scroll down to the articles section to view the citation information for individual articles to get an understanding of how each has been cited. Note that each of the counts for citing publications for these first three articles is much lower than the citation counts displayed in Google scholar ([A survey on bias and fairness in machine learning](#), [Bias in data-driven artificial intelligence systems—An introductory survey](#), [A Comprehensive Review of AI Techniques for Addressing Algorithmic Bias in Job Hiring](#)). This could be because Scite uses a smaller database of articles.

| Articles (15) | | | | | | | Export Data |
|--|------------------|-------------------|------------------|---------------------|------------|---------------------|-------------|
| Article Title | Supporting Cites | Contrasting Cites | Mentioning Cites | Citing Publications | Page Size | | |
| <input type="checkbox"/> Title | Year | Authors | Supporting | Contrasting | Mentioning | Citing Publications | |
| <input type="checkbox"/> A Survey on Bias and Fairness in Machine Learning | 2021 | Mehrabi et al. | 5 | 0 | 1,984 | 4,052 | |
| <input type="checkbox"/> Bias in data-driven artificial intelligence systems—An introductory survey | 2020 | Ntoutsi et al. | 2 | 0 | 373 | 856 | |
| <input type="checkbox"/> A Comprehensive Review of AI Techniques for Addressing Algorithmic Bias in Job Hiring | 2024 | Albaroudi et al. | 0 | 0 | 0 | 50 | |

Caption: Dashboard article table

4. After you have performed an initial search with Scite, we recommend performing [additional searches in other databases](#).

Further Resources

- [AI at Northeastern University](#), Northeastern Information Technology Services
- [Education literature review search strategies: AI and Library resources](#), Lindley Homol, Northeastern
- [Communication Studies : AI tools for your research](#), Northeastern University Library
- [Collaborating on Literature Reviews with AI](#), Daniel Serig, Northeastern Center for Advancing Teaching and Learning Through Research
- [Data Ethics: Understanding Big Data and Algorithmic Bias](#), Digital Integration Teaching Initiative
- [AI for Literature Reviews](#), Digital Integration Teaching Initiative
- [Help & Tutorials](#), Scite
- [AI Prompt Handbook for Academia](#), Research Solutions