

Artificial Intelligence Research Tools

Guide Overview

The primary purpose of this guide is to provide access to information about Generative Artificial Intelligence (GenAI) sources available to be used for research that have been specifically described as useful for research and data analysis. Most tools have a variety of levels of access and provide a variety of services but it can be challenging to locate the supplemental information for these resources. This guide does not compare or summarize those tools, it simply provides source links for more information about the resources. This guide is separated into the type of GenAI service provided. Descriptions are generally taken verbatim or minorly summarized from the website provided.

Additional sections of this guide provide access to resources that compare and contrast these tools and a GenAl Product Tracker that provides a much more thorough examination of a larger pool of GenAl tools.

This is a living document that will continue to grow. Please check the <u>Oregon DOT Library</u> <u>webpage</u> for the most updated version.

GenAl Overviews, Comparisons, and Tracking Resources

Artificial Intelligence Research Tools Comparisons

Al Research Tools Petting Zoo Webinar

Link: https://youtu.be/JbH4DlD1MYA?si=oC 9xV2aNIJyZe1f

<u>Description</u>: Mozhdeh Khodarahmi (Associate Library Director of Access, Instruction, and Research Services) and Brigid McCreery (Research and Instruction Librarian) from Macalester College will present. Mozhdeh has been immersing herself in the study of artificial intelligence since early 2023 and undertook a project this summer to test AI tools designed to help academic researchers with literature reviews and hypothesis generation. In this session, we will learn how to leverage two powerful AI academic search tools: Elicit and Semantic Scholar, as well as two AI visual representation and literature mapping Tools: ResearchRabbit and Open Knowledge Maps.

<u>More information</u>: The explanation of the tools overview starts around 20:50 in the recording.

An Evaluation of Cutting-Edge AI Research Tools Using the REACT Framework

<u>Link:</u> https://www.infotoday.com/cilmag/oct24/Archambault-Rincon--An-Evaluation-of-Cutting-Edge-Al-Research-Tools-Using-the-REACT-Framework.shtml

<u>Description</u>: This article explores a range of cutting-edge AI research tools, evaluating their key features, benefits, and drawbacks using the REACT framework (Relevancy, Ease of Use, Assessing DEIA [diversity, equity, inclusion, and accessibility], Currency, Transparency & Accuracy). We focus on two categories of tools: citation-based literature mapping tools and text-extraction tools for literature reviews.

<u>More information</u>: Other commentary and published reviews specific to the products below will be listed under the product in question.

Artificial Intelligence Tracking

Generative AI Product Tracker by Ithaka S+R

Link: https://sr.ithaka.org/our-work/generative-ai-product-tracker/

<u>Description</u>: The Generative AI Product Tracker lists GenAI products that are either marketed specifically towards postsecondary faculty or students or appear to be actively in use by postsecondary faculty or students for teaching, learning, or research activities. The Tracker is a living document, which they update regularly as new products enter the market or new information about existing products becomes available.

More information: https://sr.ithaka.org/publications/generative-ai-in-higher-education/

Generative AI Applications

Data Analysis and Visualization

ChatGPT

Link: https://chatgpt.com/

<u>Description</u>: An OpenAI product used for a variety of tasks, including but not limited to data analysis, visualizations, and explanations of statistical concepts.

<u>More information</u>: Click on https://chatgpt.com/overview and then access the Features dropdown for a full list and overview of the functionality.

Claude

<u>Link</u>: https://claude.ai/login?returnTo=%2F%3F

<u>Description</u>: Claude is an artificial intelligence, trained by Anthropic using Constitutional AI to be safe, accurate, and secure — the trusted assistant for you to do your best work.

<u>More information</u>: A general overview, <u>https://claude.com/product/overview</u>, is provided along with some limited training videos are freely available under the *Learn* tab. An email is required to use Claude.

Frontiers FAIR² Data Management

Link: https://fair2.ai/

<u>Description</u>: FAIR² (pronounced FAIR squared) formalizes the FAIR data principles into a verifiable, machine-actionable framework for AI-ready, responsibly governed data. It provides a context-rich structure linking methods, provenance, contributors, and governance in a form readable by both humans and machines—ensuring rigor, transparency, and reproducibility.

More information: Despite advances in open science, researchers still struggle with fragmented, inconsistently formatted data that is difficult to curate and reuse. FAIR² Data Management simplifies this process by automating metadata enrichment, improving data quality, and ensuring datasets are fully prepared for reuse, analysis, and publication. Frontiers FAIR² enables open science by making research data accessible, reusable, and verifiable — building transparency, trust, and reproducibility in every field. More information:

https://www.frontiersin.org/about/fair-data-management#fair2-getting-started.

Julius Al

Link: https://julius.ai/

<u>Description</u>: Connect your data, ask questions in plain English, and get insights in seconds. No coding required. Your data stays private and is never used to train AI. Julius is compliant with industry-leading standards including SOC 2 Type II and TX-RAMP, and actively progressing toward GDPR compliance.

<u>More information</u>: A variety of guides are provided in the form of tips, videos, glossary, and even start guides, https://julius.ai/faq/chat-start-guide. An email is required to try for free.

DataRobot

Link: https://www.datarobot.com/

<u>Description</u>: The DataRobot Agentic AI Platform seamlessly orchestrates the full lifecycle of AI agents across a wide range of deployment environments, including on-prem and private GPU clouds, sovereign GPU clouds, and major public cloud platforms.

<u>More information</u>: A variety of AI platforms are provided, along with documentation section that may provide a useful training space,

https://docs.datarobot.com/en/docs/index.html. Signing up for a free trial is required for access.

Literature Reviews and Research Discovery

Consensus.app

Link: https://consensus.app/

<u>Description</u>: Al-powered search engine specifically designed for academic research. It allows users to search through a vast database of over 200 million research papers, providing evidence-based answers and detailed insights.

More information:

- More information about the key features can be found on the Dessign website, <a href="https://dessign.net/consensus-app/#:~:text=Consensus.app%20is%20an%20Al-powered%20search%20engine%20specifically%20designed,research%20papers%2C%20providing%20evidence-based%20answers%20and%20detailed%20insights.
- Additional reviews and commentary for Consensus can be found here: https://lerrn.librarika.com/search?tag_id=3668092.

Copyscape

Link: https://www.copyscape.com/

<u>Description</u>: Copyscape provides a free plagiarism checker for finding copies of your web pages online, as well as three more powerful <u>professional solutions</u> for preventing content theft and content fraud.

<u>More information</u>: More about Copyscape, including a demonstration can be found here, https://www.copyscape.com/about.php. A limited number of free searches are available but the premium package is required for unlimited access.

Elicit

Link: https://elicit.com/

<u>Description</u>: Al for scientific research, use Elicit to more quickly understand what science already knows, so that you can discover the unknown. Semantically search over 138 million academic papers and 545,000 clinical trials. Elicit generates high-quality research briefs abased on a process inspired by systematic reviews.

More information:

- Sign in is required to try it out. The Help Center provides training, tips, and subscription information, https://support.elicit.com/.
- Additional reviews and commentary for Elicit can be found here: https://lerrn.librarika.com/search?tag_id=2938022.

Perplexity.ai

Link: https://www.perplexity.ai/

<u>Description</u>: Perplexity's Pro Search feature provides a guided Al search experience, allowing you to explore topics in depth and learn new things.

<u>More information</u>: The getting started section provides a good overview of the product, examples, and other information, https://www.perplexity.ai/hub/getting-started#what-is-perplexity.

Research Rabbit

<u>Link</u>: https://researchrabbitapp.com/

<u>Description</u>: "Spotify for papers", it can personalize research services through intuitive exploration, personalized recommendations, visualizations, discover authors, and it integrates with Zotero.

More information:

- Sign up is free and demonstrations are available here https://www.researchrabbit.ai/.
- Additional reviews and commentary for Research Rabbit can be found here: https://lerrn.librarika.com/search?tag_id=3578729.

Scite.ai

Link: https://scite.ai/

<u>Description</u>: They combine unmatched access to both Open Access and paywalled content with their Smart Citations database that analyzes and classifies 1.2B+ citations across 200M+ sources. This combination powers their Al and search tools, giving you verifiable insights you can trust.

More information:

- An article on how Scite works can be found here
 https://direct.mit.edu/qss/article/2/3/882/102990/scite-A-smart-citation-index-that-displays-the.
- Help files are found here https://help.researchsolutions.com/hc/en-us/categories/31947397460116-Scite.
- Additional reviews and commentary for Scite can be found here: https://lerrn.librarika.com/search?tag_id=2511965.

Scopus.Al

Link: only available after signup

<u>Description</u>: Scopus AI combines trusted, peer-reviewed content with sophisticated AI to deliver faster, deeper insights. Built for academic workflows, it accelerates discovery, identifies patterns and supports strategic thinking—all while championing academic rigor.

More information: https://www.elsevier.com/products/scopus/scopus-ai

Semantic Scholar

Link: https://www.semanticscholar.org/

<u>Description</u>: Semantic Scholar provides free, Al-driven search and discovery tools, and open resources for the global research community. We index over 200 million academic papers sourced from publisher partnerships, data providers, and web crawls.

More information:

- Product overview options are available here, https://www.semanticscholar.org/product.
- Librarian resources can be found here,
 https://www.semanticscholar.org/about/librarians.
- General tutorials can be found here, https://www.semanticscholar.org/product/tutorials.
- Additional reviews and commentary for Semantic Scholar can be found here: https://lerrn.librarika.com/search?tag_id=3071953.

Questions or Comments

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