Introduction to AI tools for academia

This document serves as a guide for the hands-on session aimed at exploring state-of-the-art artificial intelligence tools specifically designed to augment academic research. The tools highlighted herein represent some of the most advanced tools currently available, each tailored to streamline various aspects of the research process, from literature mapping and citation management to sophisticated text analysis and stylistic refinement. Each tool includes a QR code and hyperlink to facilitate easy access, making it simple for you to try out these tools.

If you have any questions prior to the session or any follow-up questions, please contact me at: adam.urban@techlib.cz.

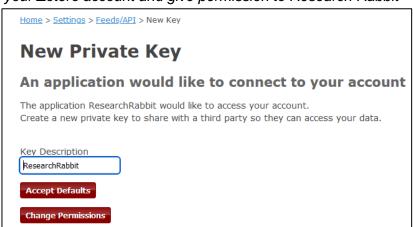
RESEARCH RABBIT



- Literature mapping tool
- Free to use, registration is required
- Can be synchronized with Zotero (two-way synchronization)
- You have full control over the output (based on your collection)
- 1. Connect to Zotero in Research Rabbit



2. Log-in to your Zotero account and give permission to Research Rabbit







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SCISPACE





- Is not necessary to log-in; free to use (with some limitations)
- Registration can be done via Google account
- Work with academic papers using a wide range of tools (literature search, Chat with PDF, academic writing tools)



SCITE



- One of the most advanced question-based tools (option to customize search query)
- <u>7-day trial, then behind paywall</u>; registration is required (not necessary for our session)
- Browser plug-in
- Smart Citations (mentioning, supporting, and contrasting statements)
- Provides exact part of the paper that has been used to generate the output (reduces risk of hallucinations and unintentional plagiarism)
- LLM Prompt Handbook for Scite (can be provided on demand)

CHATGPT



- Create an account or login via Google account
- ChatGPT-4o in limited access → ChatGPT-4o mini
- Broad scale of GPT Agents designed for academic work
- Plus users (paid version) have option to <u>create own GPT agent</u>
- The standalone ChatGPT is not as powerful in literature search, but can be improved with GPT agents (Scispace, Consensus, ...)
- Great for brainstorming, stylistics, text revision, and summaries

NotebookLM

- Al powered note-taking tool
- Based on Google Gemini model
- Useful when working with multiple documents/papers
- "The knowledge" is limited by uploaded documents reduces hallucinations







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TOOL	PRIMARY FUNCTION	KEY FEATURES	BEST USE CASES	LIMITATIONS	COST
Research Rabbit	Literature mapping and discovery	Zotero integration, literature visualization, citation key exploration	Literature exploration, tracking research trends, extending your collection	Risk of a rabbit hole, the interface might be confusing for a new user	Free
SciSpace	Question- based search/ text analysis	Research assistant, summarization, concept explanation, searching literature	Answers to academic questions, article analysis	Limited access to advanced functions, difficult to double-check	Free/ 20\$ monthly
Scite	Question- based search	Citation analysis, searching literature, Browser plugin	Answers to academic questions with up to date references, article citation report	Paywall	7 day trial/ 20\$ monthly
ChatGPT	Writing and brainstorming assistant	Broad scale of GPT Agents, customize your GPT (knowledge base), chat history, internet access, Multimodal communication	Ideas and outline generation, tutoring, text analysis, feedback, data analysis and coding	Hallucinations, limited access to advanced functions, question of data privacy	Free/ 20\$ monthly
NotebookLM	Notes creation and management	Multidocument analysis, question-based summaries multimedia formats (images and audio), collaboration on notes in real-time	Organizing research notes, writing outlines, and capturing spontaneous ideas	Limited export options, lacks advanced export options like PDF or Word formats	Free

Figure 1 - Comparison of AI research tools

For more Al tools and additional resources beyond those covered here, we encourage you to explore our comprehensive Al Research Guide.