



AI Research Tools

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AI Tools for Research: An OVERVIEW

This presentation highlights over 30 cutting-edge AI tools designed to support academic research, writing, literature review, coding, and data analysis. From visual citation mapping to automated transcription and smart citation analysis, each tool serves a unique purpose in streamlining scholarly work.

Explore their:

- Purpose and primary use cases
- Features and platform access
- Benefits for students, faculty, and researchers

ChatGPT



Paper Digest

- Website: <https://www.paperdigest.org/console/>
- Cost: \$6.66 - \$10.99/month
- Type: AI-generated paper summaries
- Summary: Paper Digest provides concise summaries of academic papers, highlighting goals, methods, results, and contributions to speed up literature reviews.
- Best For:
 - Quickly understanding the structure and content of research articles
 - Preparing annotated bibliographies
 - Skimming through papers before deep reading
- IT Organizational Security Risk: Medium – Cloud-based; processes uploaded academic papers; moderate data privacy concerns.

Elicit

- Website: <https://elicit.org>
- Cost: Free
- Type: AI-powered research assistant
- Summary: Elicit helps researchers automate literature review tasks by answering questions, finding relevant papers, and extracting details like methods and outcomes.
- Best For:
 - Formulating research questions
 - Extracting data for evidence synthesis
 - Literature mapping and comparison
- IT Organizational Security Risk: Medium – Cloud-based; stores queries; potential exposure of research topics.

Litmaps

- Website: <https://www.litmaps.com>
- Cost: Free or \$10/month (Unlimited)
- Type: Visual Literature Search
- Summary: Litmaps enables visual discovery of academic papers based on citation networks, helping track the evolution of ideas over time.
- Best For:
 - Exploring citation relationships visually
 - Creating and sharing interactive literature maps
 - Tracking citation-based paper discovery over time
- IT Organizational Security Risk: Low – Minimal sensitive data exposure.

Research Rabbit

- Website: <https://www.researchrabbit.ai>
- Cost: Free
- Type: Visual Literature Search
- Summary: Research Rabbit is an academic exploration tool that allows users to track and visualize paper networks. It helps discover related works and build a structured literature landscape.
- Best For:
 - Building and expanding literature networks
 - Discovering new or related papers visually
 - Organizing research collections
- IT Organizational Security Risk: Low – Low risk unless sensitive data is entered.

Connected Papers

- Website: <https://www.connectedpapers.com>
- Cost: Free or \$6/month (Unlimited)
- Type: Visual Literature Search
- Summary: Connected Papers generates visual maps of academic literature based on co-citation networks, ideal for identifying foundational and derivative works.
- Best For:
 - Finding adjacent and foundational papers
 - Visualizing topic-related research structures
 - Understanding research evolution
- IT Organizational Security Risk: Low – Uses public citations only.

Jenni.ai

- Website: <https://jenni.ai/>
- Cost: Free with Pro option
- Type: AI Writing Assistant
- Summary: Jenni.ai offers AI-assisted writing for academic and professional use, including citations, paraphrasing, and grammar support.
- Best For:
 - Drafting research papers or essays
 - Improving academic tone and clarity
 - Inserting citations and paraphrased content
- IT Organizational Security Risk: Medium – Cloud-based; processes text; potential leakage of unpublished work.

QuillBot

- Website: <https://quillbot.com>
- Cost: Free with premium plans
- Type: AI Writing Assistant
- Summary: QuillBot is an AI-powered paraphrasing and grammar correction tool that helps users improve clarity, tone, and fluency of academic and professional writing.
- Best For:
 - Paraphrasing academic content
 - Grammar correction and fluency improvement
 - Writing clarity and tone enhancement
- IT Organizational Security Risk: Medium – Cloud processing; moderate retention risk.

Otter.ai

- Website: <https://otter.ai/>
- Cost: Free
- Type: Transcription AI Software
- Summary: Otter.ai transcribes audio in real-time or from uploads, with features like speaker ID and keyword search for academic meetings or interviews.
- Best For:
 - Recording lectures or interviews
 - Creating searchable transcripts for qualitative research
 - Real-time transcription during virtual classes
- IT Organizational Security Risk: High – Stores audio; potential exposure of confidential content.

Raven's Eye

- Website: <https://ravens-eye.net/>
- Cost: Free (some features may be paid)
- Type: AI-powered text analysis tool
- Summary: Raven's Eye uses NLP to analyze large volumes of qualitative data, enabling researchers to extract themes, sentiment, and word usage patterns.
- Best For:
 - Textual data analysis in qualitative research
 - Generating insights from survey responses
 - Understanding language trends in documents
- IT Organizational Security Risk: Medium – Possible exposure if sensitive text is uploaded.

Semantic Scholar

- Website: <https://www.semanticscholar.org/>
- Cost: Free
- Type: AI-powered research tool for scientific literature
- Summary: Semantic Scholar provides AI-enhanced search and filtering of scholarly papers with smart citation graphs and influence scores.
- Best For:
 - Discovering peer-reviewed articles
 - Tracing citation impact and influence
 - Filtering academic content by relevance
- IT Organizational Security Risk: Low – No private document storage.

Scispace

- Website: <https://typeset.io/>
- Cost: Free
- Type: AI-powered research tool for scientific literature
- Summary: Scispace is a reading and discovery platform for researchers that helps parse, highlight, and explain complex scientific papers.
- Best For:
 - Reading and understanding dense research papers
 - Searching for scientific explanations and keywords
 - Collaborative annotation and exploration
- IT Organizational Security Risk: Medium – Processes uploaded PDFs.

Perplexity

- Website: <https://www.perplexity.ai>
- Cost: Free
- Type: Conversational AI for research
- Summary: Scispace is a reading and discovery platform for researchers that helps parse, highlight, and explain complex scientific papers.
- Best For:
 - Reading and understanding dense research papers
 - Searching for scientific explanations and keywords
 - Collaborative annotation and exploration
- IT Organizational Security Risk: Medium – Stores queries; potential leakage risk.

GetLiner

- Website: <https://getliner.com>
- Cost: Free
- Type: AI-powered web highlighter and reader
- Summary: GetLiner uses AI to highlight important content on web pages and summarize key points for efficient online reading and annotation.
- Best For:
 - Speed-reading articles and papers
 - Saving and reviewing online research content
 - Highlighting important web-based data
- IT Organizational Security Risk: Low – Minimal sensitive data exposure.

Consensus

- Website: <https://consensus.app/>
- Cost: Free
- Type: AI-powered consensus engine for scientific research
- Summary: Consensus answers scientific questions based on peer-reviewed literature by summarizing the collective evidence and citing sources.
- Best For:
 - Finding evidence-based answers
 - Summarizing scientific viewpoints
 - Evaluating scholarly consensus
- IT Organizational Security Risk: Low – No personal data storage.

NotebookLM

- Website: <https://notebooklm.google.com/>
- Cost: Free
- Type: AI research notebook powered by Google
- Summary: NotebookLM lets users upload documents and query them with AI, generating contextual summaries, insights, and citations across documents.
- Best For:
 - Synthesizing notes and documents
 - Asking questions across readings
 - Creating study aids and briefings
- IT Organizational Security Risk: High – Stores uploaded documents.

Google Scholar

- Website: <https://scholar.google.com>
- Cost: Free
- Type: Academic search engine
- Summary: Google Scholar indexes scholarly articles across disciplines and allows users to track citations, authors, and related works.
- Best For:
 - Finding scholarly papers
 - Monitoring citation metrics
 - Accessing cross-disciplinary research
- IT Organizational Security Risk: Low – Search only.

Dimensions.ai

- Website: <https://www.dimensions.ai>
- Cost: Free for researchers (paid enterprise plans)
- Type: Research discovery with impact metrics
- Summary: Dimensions.ai connects research outputs (articles, grants, patents) with metrics, offering insights into research trends and funding.
- Best For:
 - Tracking research funding and trends
 - Discovering research impact
 - Integrating metadata with research output
- IT Organizational Security Risk: Low – Publicly indexed data.

SciNote

- Website: <https://www.scinote.net>
- Cost: Free (with paid team plans)
- Type: Electronic Lab Notebook with AI
- Summary: SciNote is a digital notebook for lab-based researchers to manage experiments, organize workflows, and ensure reproducibility.
- Best For:
 - Planning and documenting lab experiments
 - Collaborating on scientific protocols
 - Maintaining research traceability
- IT Organizational Security Risk: High – Could store confidential research.

Trinka AI

- Website: <https://www.trinka.ai>
- Cost: Free with premium features
- Type: Academic grammar & writing enhancement
- Summary: Trinka AI is an academic writing assistant that improves grammar, tone, and clarity, specifically designed for scientific and technical writing.
- Best For:
 - Editing academic manuscripts
 - Improving technical grammar and tone
 - Preparing documents for publication
- IT Organizational Security Risk: Medium – Cloud grammar check.

Writefull

- Website: <https://writefull.com>
- Cost: Free with Pro plan
- Type: AI-powered academic writing assistant
- Summary: Writefull offers academic phrase suggestions, grammar corrections, and structural support using a large database of research writing.
- Best For:
 - Writing and refining scientific text
 - Checking language against academic norms
 - Using discipline-specific vocabulary accurately
- IT Organizational Security Risk: Medium – Processes academic text.

Zotero + AI Plugins

- Website: <https://www.zotero.org>
- Cost: Free
- Type: Reference manager + AI summarizer
- Summary: Zotero is a free reference manager with available AI plugins that assist in summarizing, annotating, and organizing research sources.
- Best For:
 - Managing research references
 - Summarizing and tagging PDFs
 - Collaborative note-taking
- IT Organizational Security Risk: Medium – AI plugins may process PDFs in cloud.

EndNote Click

- Website: <https://endnote.com>
- Cost: Free
- Type: Citation manager with full-text access
- Summary: EndNote Click (formerly Kopernio) locates full-text PDFs of journal articles and integrates them into reference managers like EndNote.
- Best For:
 - Finding and saving academic PDFs
 - Quick access to paywalled research
 - Seamless integration with citation tools
- IT Organizational Security Risk: Medium – Retrieves PDFs; metadata exposure possible.

Scite.ai

- Website: <https://scite.ai>
- Cost: Free with premium features
- Type: Smart citation analysis
- Summary: Scite uses AI to show whether a paper has been supported, mentioned, or contradicted by other research, offering deeper citation context.
- Best For:
 - Evaluating research credibility
 - Identifying conflicting or confirming studies
 - Citation quality assessment
- IT Organizational Security Risk: Low – Minimal sensitive info handled.

Iris.ai

- Website: <https://iris.ai>
- Cost: Free trial + subscription
- Type: Semantic AI research assistant
- Summary: Iris.ai semantically maps research concepts to help users explore and classify literature based on research needs and topics.
- Best For:
 - Semantic literature discovery
 - Document clustering and classification
 - Navigating complex research fields
- IT Organizational Security Risk: Medium – Processes uploaded documents.

ResearchGPT

- Website: <https://chat.openai.com>
- Cost: Free (Pro via ChatGPT)
- Type: LLM-powered research assistant
- Summary: ResearchGPT, via plugins in ChatGPT, enables question answering and summarization of academic content from uploaded PDFs or integrated sources.
- Best For:
 - Asking scholarly questions via chat
 - Summarizing and analyzing uploaded documents
 - Performing research tasks with conversational AI
- IT Organizational Security Risk: Medium – Document upload risk.

Explainpaper

- Website: <https://www.explainpaper.com>
- Cost: Free
- Type: AI explainer for dense academic text
- Summary: Explainpaper allows users to highlight sections of research papers and get plain-language explanations to improve comprehension.
- Best For:
 - Decoding complex terminology
 - Explaining methods or equations
 - Learning from unfamiliar disciplines
- IT Organizational Security Risk: Medium – Uploads may contain unpublished content.

ChatGPT

Website: <https://chat.openai.com>

Cost: Free (GPT-3.5) / \$20/month (Pro with GPT-4o)

- Type: General LLM for research support
- Summary: ChatGPT is a conversational AI platform with plugins and tools that support summarization, writing, coding, and document interaction.
- Best For:
 - Literature review assistance
 - Drafting and editing writing
 - Interacting with uploaded PDFs and datasets
- IT Organizational Security Risk: Medium – Cloud AI; document handling risk.

Gemini

Website: <https://gemini.google.com>

Cost: Free (Pro via Google One)

Type: AI assistant with Google integration

Summary: Gemini is a Google-based LLM that integrates with Google Workspace, supporting content generation and summarization across documents.

- Best For:
 - Collaborative document drafting
 - Summarizing and querying Google Docs
 - Creating outlines and responses
- IT Organizational Security Risk: Medium – Processes Google Docs.

Claude

Website: <https://claude.ai>

Cost: Free or \$20/month (Pro)

Type: LLM with long context understanding

Summary: Claude is a large language model from Anthropic known for its ability to process long documents and reason across multiple inputs.

- Best For:
 - Summarizing lengthy PDFs
 - Analyzing multiple documents at once
 - Drafting responses with nuance
- IT Organizational Security Risk: Medium – Cloud document processing.

GitHub Copilot

Website: <https://github.com/features/copilot>

Cost: \$10/month

Type: AI coding assistant

Summary: GitHub Copilot assists with writing code, automating data tasks, and developing software. It,Äôs not research-specific but is incredibly useful in data-driven research, digital humanities, machine learning, or computational social science.

- Best For:
 - Writing and debugging research code (Python, R, etc.)
 - Analyzing data or building simulations
 - Automating research tasks (e.g., data scraping, cleaning)
 - Integrating APIs, building apps, or working with research software
- IT Organizational Security Risk: Medium – Proprietary code exposure risk.

Monica AI

Website: <https://monica.im>

Cost: Free with premium

Type: AI Personal Assistant for Research and Productivity

Summary: Monica AI is a personal AI assistant designed to boost productivity and support research workflows. It provides writing assistance, summarization, translation, and conversational Q&A across multiple platforms..

- Best For:
 - Managing academic tasks and productivity
 - Summarizing and translating research content
- IT Organizational Security Risk: Medium – Cloud-based; varied data processing.

Tool Type Purposes and Examples



Type	Purpose	Tool Example	Key Features	Best For
Academic grammar & writing enhancement	Improve academic writing clarity, tone, and correctness.	Trinka AI	Grammar correction, journal format checks, formal tone enhancement	Non-native English writers, manuscript preparation, journal submissions
Academic search engine	Locate scholarly articles, books, and citations across disciplines.	Google Scholar	Citation tracking, related articles, author profiles	Finding academic sources, citation generation, cross-disciplinary discovery
AI assistant with Google integration	Leverage Google's Gemini AI within Docs, Sheets, and Gmail.	Gemini	Real-time suggestions, document summarization, Gmail drafting	Collaborative editing, note generation, academic writing in Google Workspace
AI coding assistant	Assist in writing and debugging research-related code using AI.	GitHub Copilot	Code suggestions, autocompletion, support for data workflows	Research automation, data analysis scripts, computational modeling

Tool Type Purposes and Examples (cont.)



Type	Purpose	Tool Example	Key Features	Best For
AI explainer for dense academic text	Simplify complex academic writing into plain language.	Explainpaper	Section highlighting, on-demand explanation, user-friendly design	Learning new fields, interpreting dense theories, simplifying methods sections
AI Personal Assistant for Research and Productivity	Boost productivity and support research workflows with an AI assistant.	Monica AI	Writing assistance, summarization, translation, conversational Q&A	Managing academic tasks, summarizing research content, translation support
AI research notebook powered by Google	Enable interactive document analysis with Google-integrated AI.	NotebookLM	File upload, content synthesis, document Q&A	Organizing and querying your personal research notes
AI Writing Assistant	Support academic writing with AI-based suggestions and improvements.	Jenni.ai, Quillbot	Autocomplete, grammar support, citations, paraphrasing	Academic paper drafting, essay writing, thesis development

Tool Type Purposes and Examples (cont.)



Type	Purpose	Tool Example	Key Features	Best For
AI-generated paper summaries	Provide concise summaries of academic papers for quick comprehension.	Paper Digest	Highlights abstracts, methods, results, contributions; saves reading time	Literature reviews, abstract synthesis, topic scanning
AI-powered academic writing assistant	Assist in writing and editing academic papers using machine learning.	Writefull	Context-aware corrections, discipline-specific phrasing, language feedback	Scientific paper composition, thesis editing, academic revision
AI-powered consensus engine for scientific research	Determine scientific consensus based on peer-reviewed evidence.	Consensus	Evidence summarization, confidence levels, citation backing	Policy research, public health questions, scientific inquiry
AI-powered research assistant	Assist with research questions, literature discovery, and synthesis.	Elicit, ResearchGPT	Semantic search, data extraction, academic Q&A	Research planning, hypothesis generation, evidence synthesis

Tool Type Purposes and Examples (cont.)



Type	Purpose	Tool Example	Key Features	Best For
AI-powered research tool for scientific literature	Search, organize, and understand scientific research papers.	Semantic Scholar, Scispace	Semantic filters, citation insights, reading support	Scientific research, paper exploration, structured discovery
AI-powered text analysis tool	Analyze large volumes of qualitative text data.	Raven's Eye	Theme identification, sentiment analysis, keyword tracking	Qualitative research, surveys, language studies
AI-powered web highlighter and reader	Enhance online reading by highlighting and summarizing content.	GetLiner	Webpage summarization, highlight capture, note syncing	Reading long articles, extracting insights from the web
Citation manager with full-text access	Locate and store full-text academic papers for citation workflows.	EndNote Click	One-click PDF access, journal integration, citation syncing	Literature gathering, managing access to paywalled content, seamless reference entry

Tool Type Purposes and Examples (cont.)



Type	Purpose	Tool Example	Key Features	Best For
Conversational AI for research	Answer academic questions via chat interface with citations.	Perplexity, ChatGPT	Conversational search, source referencing, interactive Q&A	Quick answers, exploratory research, summarizing trends
Electronic Lab Notebook with AI	Digitally manage experiments and lab workflows with automation support.	SciNote	Protocol tracking, reproducibility support, collaboration tools	Scientific lab teams, experiment documentation, workflow control
General LLM for research support	Use conversational AI tools with plugins for various research tasks.	ChatGPT (with ScholarAI, Consensus)	Text generation, summarization, plugin-based search	Brainstorming, writing, literature exploration, code assistance
LLM with long context understanding	Analyze and summarize long documents using extended context windows.	Claude	100K+ token capacity, nuanced analysis, multi-document comparison	Reading full-length papers, comparing sources, processing large PDFs

Tool Type Purposes and Examples (cont.)



Type	Purpose	Tool Example	Key Features	Best For
LLM-powered research assistant	Leverage large language models to summarize and query research documents.	ResearchGPT	PDF summarization, chat-based querying, document synthesis	Deep reading support, long-document comprehension, synthesis tasks
Reference manager + AI summarizer	Store and organize citations while using AI to summarize PDFs.	Zotero + AI Plugins	PDF management, annotation, AI note generation	Research organization, quick literature overviews, collaborative citation tracking
Research discovery with impact metrics	Analyze research output, influence, and funding patterns.	Dimensions.ai	Grants, citations, patent connections, institution-level data	Strategic research planning, funding analysis, impact assessment
Semantic AI research assistant	Discover and classify literature through conceptual mapping.	Iris.ai	Concept matching, paper clustering, topic classification	Exploring interdisciplinary topics, identifying niche research areas

Tool Type Purposes and Examples (cont.)



Type	Purpose	Tool Example	Key Features	Best For
Smart citation analysis	Track how a paper has been used, whether it's supported or contradicted.	Scite.ai	Citation context labels, evidence mapping, reference scoring	Assessing research credibility, supporting literature review, verifying claims
Transcription AI Software	Convert spoken content into structured text.	Otter.ai	Real-time transcription, speaker recognition, searchable text	Lecture capture, interview transcription, meeting notes
Visual Literature Search	Visually map relationships between academic papers and ideas.	Litmaps, Research Rabbit, Connected Papers	Citation networks, visual exploration, interactive maps	Discovering related work, exploring research trends



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