

PRACTICAL AI: LESSONS FROM AN ACADEMIC LIBRARIAN'S JOURNEY

J. Denice Lewis

Wake Forest University

July 11, 2025



THE PLAN . . .

- Introducing Denice
- My AI Journey
- How I use AI



WHO IS DENICE

Avid bibliophile, rabid NFL fan, and kitchen chemist

WHO IS J. DENICE LEWIS?

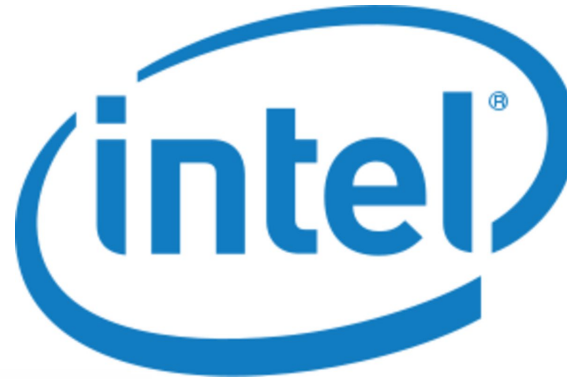
What have I learned?

- Bachelors and Masters in Electrical Engineering
- Associates in Culinary Arts
- Masters in Library and Information Science

What have I done?

- Software development, testing, training, support, and automation
- Chef
- Adjunct instructor and tutor
- Librarian

WHERE HAS DENICE WORKED?



Blackboard

PLOTTING A PATH . . .

The beginning to the now . . .

Search 900M expert analyses on any topic External > Inbox x



Josh Nicholson <josh@scite.ai>

Wed, Oct 20, 2021, 11:19 AM



to me ▾

Hi Denice,

My name is Josh Nicholson, and I am the co-founder and CEO of scite (scite.ai). scite is a new platform introducing "Smart Citations" – citations that allow users to see how a scientific paper has been cited by providing the context of the citation and a classification describing whether it provides supporting or contrasting evidence for the cited claim.

We just released something that I think might be helpful for researchers and wanted to see if you might be interested in a demo and discussion.

This new feature allows users to directly search 900M citation statements from over 27M full-text scientific articles, which can be helpful when better trying to understand a specific drug, disease, or any topic. You can even search Peppa pig on it!

You can see a short demo of it here working with our browser extension: <https://www.youtube.com/watch?v=JYjCn-4uMJk>.

And you can read more about it and test it here: <https://scite.ai/blog/what-does-the-scientific-literature-say-about>.

I would love any feedback on it.

Best wishes,
Josh

Josh Nicholson, PhD
Chief Executive Officer
scite.ai

- [Google Scholar](#)
- [Semantic Scholar](#)
- [LENS.ORG](#)
- [Dimensions](#)
- [scite.ai](#)

Follow-up: Personal Research Session (Forward citation research on "On Continued Gravitational Contraction")



Lewis, Denise <lewisjd@wfu.edu>
to Ian

Nov 10, 2021, 1:48 PM ☆ 😊 ↩

Greetings Ian,

Thank you for meeting with me this afternoon! I've included the resources that will provide the citation count for "On Continued Gravitational Contraction" and the methods for extracting the information below. **NOTE:** The link for each resource will either take you directly to the citation results or to the web page. Please let me know if I can provide any additional information.

Regards,

Denise

Resource	Citation Count	Create an Alert	Extracting the Data and Additional Information
Google Scholar	2038	Yes	I would recommend using the software Publish or Perish to extract the information from Google Scholar. Information on using Harzing's Publish or Perish is available at https://libguides.libraries.wsu.edu/c.php?g=294448&p=1960387 . NOTE: https://scholar.google.com/intl/en/scholar/inclusion.html#crawl details on how Google Scholar's web crawlers operate.
Semantic Scholar	1,180	Yes	Semantic Scholar contains different filters that you can use to limit/target the results. However, you cannot export the results.
LENS.ORG	1,349	Yes Details provided at https://support.lens.org/help-resources/workspaces/dynamic-collections/	LENS.ORG provides a variety of ways to analyze the citation results. The video https://www.screencast.com/t/Bt5y9mOhP1F provides a way to filter the results by journal article and view different visualizations analyzing the citations. Create an account to create a dynamic collection. You can export the results. To circumvent the 1,000 record limitation, batch the export by filtering by the year of the publication.
Dimensions.ai	1,061	Yes	Create an account to set an alert as well as to export the citations. To export the citations, click on the "View in Dimensions" button, click the link "Show all" to the left of Publication Citations, and after logging in, Save/Export will appear in the bar at the top of the page.
Scite.ai	1,209	Yes	Scite.ai is a new tool and is free. It provides contextual analysis of the citations. You can see where the citation appears with the text of the citing document as well as if the citation is supporting, mentioning, contrasting, or unclassified.

WHY SCITE?

Phys. Rev. **1939** DOI: 10.1103/physrev.56.455

[Access Options](#) | [Cite](#)

Set alert

[Twitter](#)
[Facebook](#)
[LinkedIn](#)

On Continued Gravitational Contraction

J. Robert Oppenheimer¹, Hartland S. Snyder²

Abstract: GRA VI "I ATIONAL CONTRACTION dense neutron phase would start at the center. By reason of the greater density of the condensed phase, the star will begin to collapse. The details of this process are difficult to analyze without knowing the change of density and the heat of condensation (latent heat of evaporation). If the latter one can be neglected beside the regular energy liberation in the stellar interior, collapsing can go on until a very thin neutron atmosphere is left around the condensed neutron core. ... [Show more](#)

[Help me understand this report](#)

Search citation statements

Context, author(s), title etc.

Order By: Oldest publication

Paper Sections

Select...

☐ Introduction 550
 ☐ Gravitational Collapse 46
 ☐ Discussion 42
 ☐ Oppenheimer-snyder Collapse 38

Citation Types

☐ Supporting 12
 ☐ Mentioning 1,296
 ☐ Contrasting 3
 ☐ Unclassified 53

Year Published

Cited by 1,949 publications (1,364 citation statements)

References 1 publication

"...Formation of black holes. The first example of a dynamically forming black hole through the collapse of a cloud of dust, was constructed by Oppenheimer and Snyder **[91]** in 1939. Examples of the formation of a black hole by concentration of gravitational radiation was constructed by Christodoulou [36]..."

Section: 4 **mentioning** confidence: 99%

Geometry of Black Hole Spacetimes

Andersson¹, Bäckdahl², Blue³ *Asymptotic Analysis in General Relativity*

6
 0
 7
 0

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[Cite](#)

"...With the General relativity replacing the Newtonian, (Schwarzschild 1916) solved the Einstein's equations and gave the black hole solution. After several works later on white dwarf (Chandrasekhar 1931) and neutron stars (Oppenheimer & Volkoff 1939), **Oppenheimer & Snyder (1939)** suggested that massive stars when reaching a critical gravitational radius could collapse into black holes forming an event horizon. So in 1970's, the black hole paradigm as the intrinsic mechanism of the AGN could explain the huge energy output of the AGN as the gravitational energy is converted into accretion energy and could explain also the short-scale variability of the center of these galaxies that should be very small (Salpeter 1964; Zel'dovich 1964; Lynden-Bell 1969; Rees 1984)..."

Section: The Signs Of the Times **mentioning** confidence: 99%

Identification of active galactic nuclei through different selection techniques

Πουλιάσης¹

1
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"...En la naturaleza no existen objetos macroscópicos con carga eléctrica neta, sin embargo se piensa que en algún instante de la formación de agujeros negros, éstos pueden poseer una pequeña cantidad de carga eléctrica que es contrarrestada inmediatamente por su entorno debido a que el campo eléctrico ocurre fuera del horizonte de eventos y, en consecuencia, un observador en el infinito lo ve como una carga puntual en reposo (cuando un agujero negro con carga eléctrica rota genera un campo magnético [32]). El agujero negro con carga eléctrica de Reissner-Nordström es una solución estática y esféricamente simétrica a las ecuaciones de Einstein (1.2), donde el tensor de energiamomento es el debido a un campo eléctrico producido por una fuente puntual de carga eléctrica Q. Dado que los fenómenos electromagnéticos están descritos por las ecuaciones de Maxwell, se asume que la densidad Lagrangiana de materia L M corresponde a la de la electrodinámica lineal de Maxwell en un espacio-tiempo curvo, así la acción que describe al sistema Einstein-Maxwell está dada por la expresión 12 **27)** donde el tensor de Faraday F μν es definido en términos del vector potencial electromagnético A μ = (−φ, A), como:..."

Section: Solución Eléctrica De Reissner-nordström **unclassified**

GENERATIVE AI TOOLS FOR RESEARCH

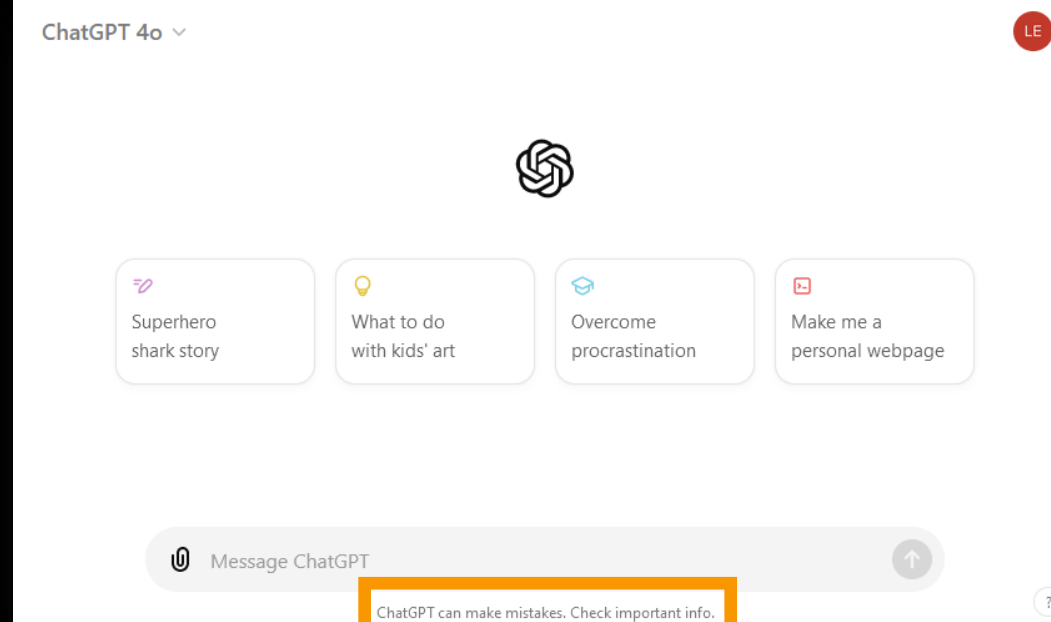
Where is the content coming from?

LARGE LANGUAGE MODEL (LLM)

ChatGPT*

Groq (not Grok)

Le Chat Mistral*



groq

Groq is Fast AI Inference

Try it



ance

What is generative AI

Why fast inference matters

LLM INFERENCE ENGINE

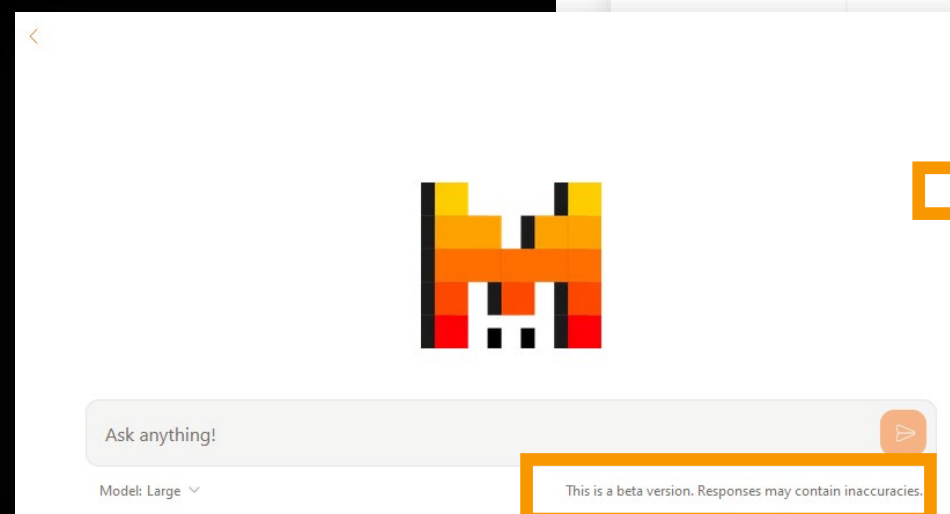
LLM-based chatbot. Accuracy, correctness or appropriateness cannot be guaranteed.

Why Groq

GroqCloud

More

9



Ask anything!

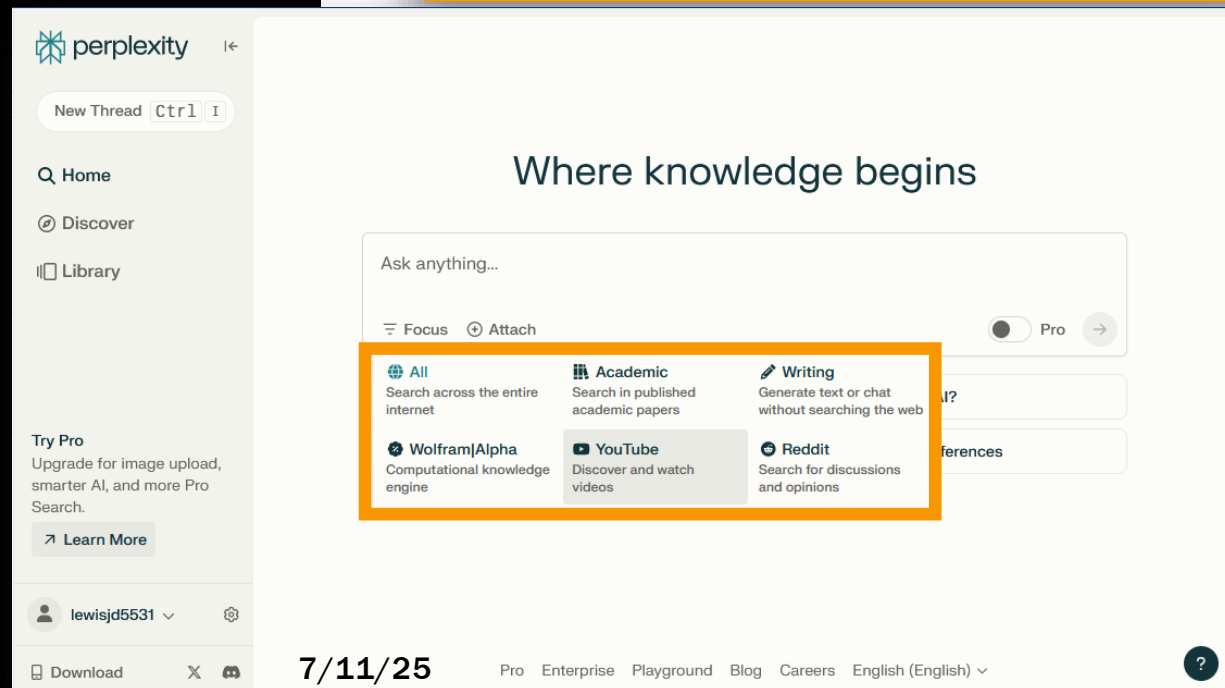
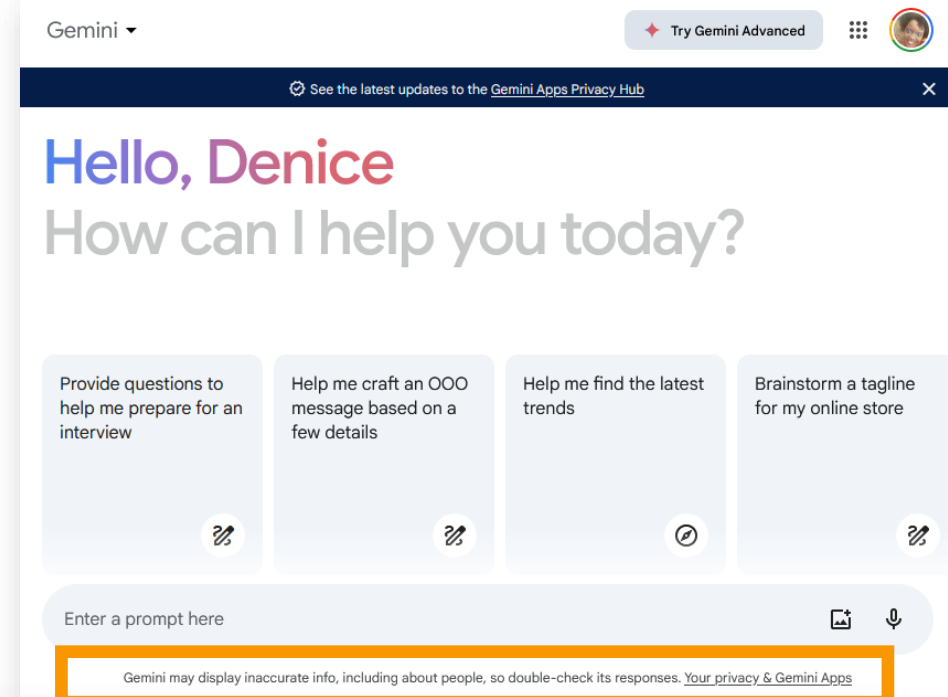
Model: Large

This is a beta version. Responses may contain inaccuracies.

WEB SCRAPPING

[Gemini](#)

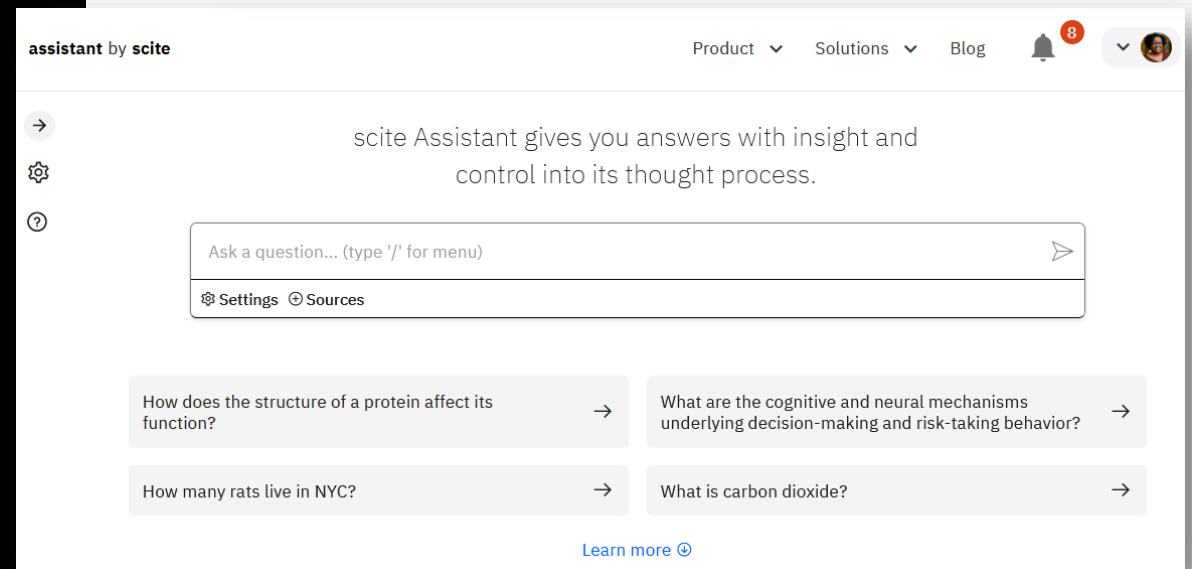
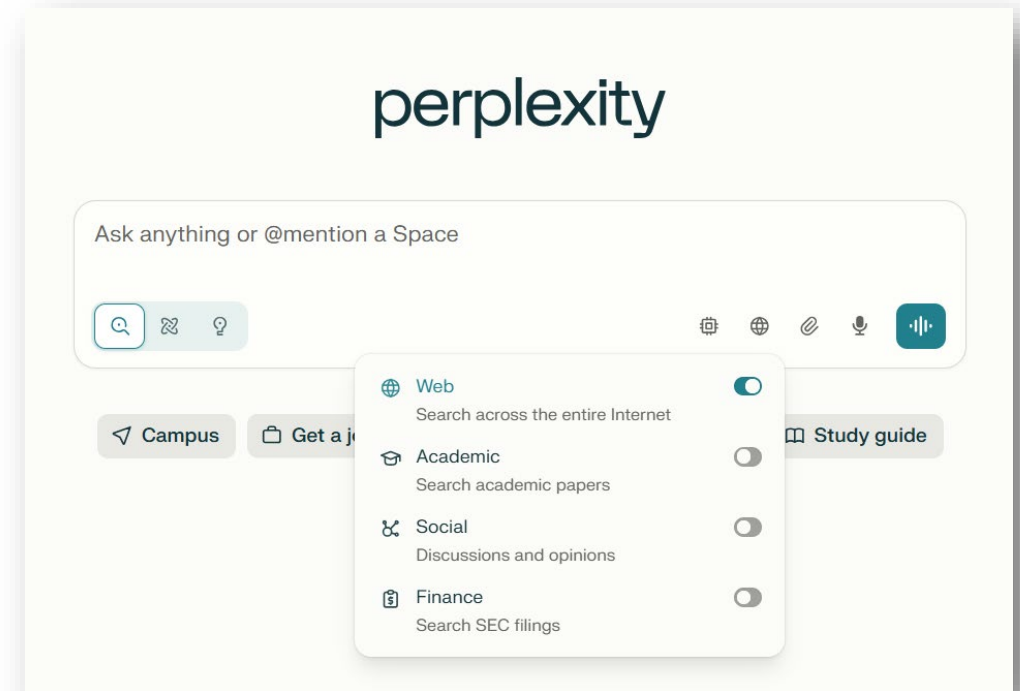
[Perplexity.ai](#)*



CORPUS

perplexity.ai*

scite.ai's Assistant



WHERE DO YOU NEED HELP IN THE RESEARCH PROCESS

Is the terminology stumping you? Do you need a research question? Do you need help developing a search string? How are you with finding relevant resources? Are you doing a literature review? How are you doing analyzing your data? Do you need an outline for your research paper?

SCITE.AI'S ASSISTANT



Ask me another question

Ask

90/99 chats used

what are collaborative models for federal, state, and local transportation groups to work together on a project

Collaborative models for federal, state, and local transportation groups to effectively work together on projects have gained prominence in addressing the fragmented nature of governance and resources in the transportation sector. These collaborations typically harness the strengths of various stakeholders, adopting structures that facilitate decision-making, fund allocation, and coordinated action across jurisdictions.

One of the most well-established collaborative models in the U.S. is the utilization of Metropolitan Planning Organizations (MPOs). These bodies serve as forums for regional governments to collaborate on transportation planning and fund allocation, effectively allowing them to address common challenges and align their transportation goals with federal and state mandates. Research indicates that the governance structures of MPOs significantly influence investment decisions and the geographic allocation of transportation funds, highlighting the importance of institutional rules in shaping public investment patterns ([An & Bostic, 2020](#); [Kim et al., 2021](#)). The involvement of different governmental levels through such organizations ensures that local needs are represented in federal and state decision-making processes, fostering an environment conducive to effective resource utilization.

Another important aspect of federal, state, and local collaboration is the emphasis on broader institutional frameworks that facilitate cooperative planning and execution. One such model involves intergovernmental coordination, which can effectively tackle collective action problems resulting from the fragmented nature of transportation governance. This includes collaborative efforts in regional and metropolitan planning that enable local governments to overcome barriers and align their transportation strategies ([Kim et al., 2021](#); [Youm & Terman, 2020](#)). Studies emphasize the necessity for local governments to engage actively with federal and state bodies to optimize resource allocation and policy implementation, thereby creating a more effective transportation framework ([Youm & Terman, 2020](#)).

Public-Private Partnerships (PPPs) also exemplify a strategic approach to fostering collaboration among federal, state, and local governments, as well as private sector entities. These partnerships not only mobilize resources but also introduce innovative practices and accountability mechanisms through shared risks and responsibilities. By leveraging private sector expertise and financing, transportation projects can achieve higher efficiency and sustainability, aligning both public interest and private investment ([Moore et al., 2022](#)). Moreover, successful models of PPPs often rely on comprehensive data-sharing agreements that enhance transparency and mutual accountability among partners, highlighting the significance of data in collaborative frameworks.

Enhancing the use of technology in these collaborative models is crucial. For instance, the integration of federated learning approaches can facilitate collaborative learning among transportation networks while preserving data privacy. By allowing various stakeholders to contribute to shared models without compromising local data, this technology can support the efficient optimization of traffic management and safety strategies ([Reddy & Muralidhar, 2023](#); [Guo et al., 2023](#)). Evolving cybersecurity protocols, such as blockchain integration, bolster the integrity and security of collaborative ventures in transportation, ensuring that sensitive data is handled ethically and strategically ([Li et al., 2024](#); [Guo et al., 2023](#)).

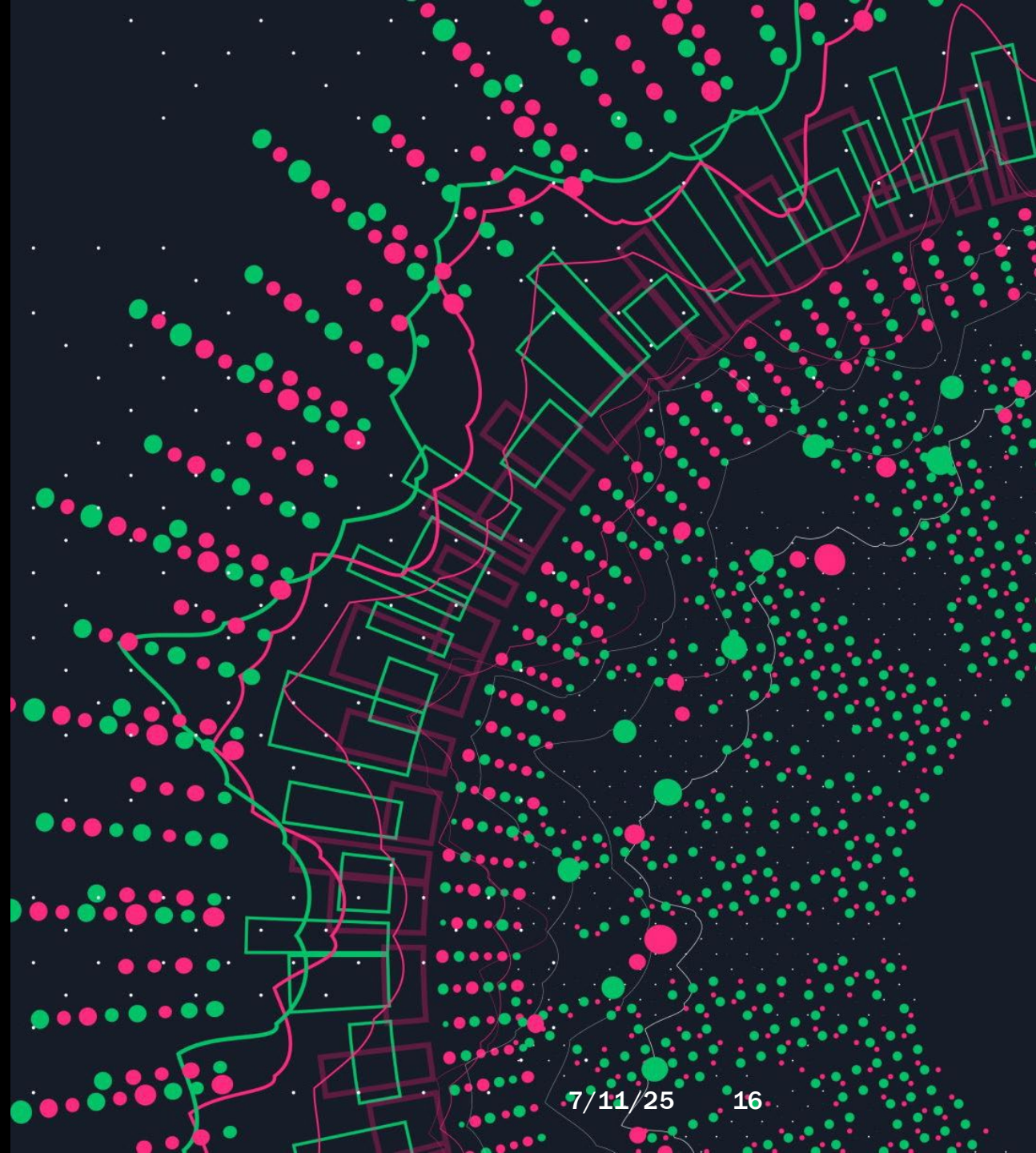
Another facet of successful intergovernmental collaboration in transportation includes addressing institutional challenges that arise during implementation. Studies have found that federal policies often need to be adaptable to local contexts to promote effective collaboration ([Ismail & Ariffin, 2020](#); [Youm & Terman, 2020](#)). As transportation needs vary significantly across regions, federal initiatives must recognize and accommodate diverse local transportation landscapes, thereby fostering an inclusive collaborative framework that encourages flexibility and responsiveness.

In conclusion, the effectiveness of collaborative models among federal, state, and local transportation groups hinges on structured frameworks such as MPOs, public-private partnerships, and technological advancements that facilitate data-driven decision-making. These approaches enable stakeholders to address complex regional transportation challenges collectively, ensuring that resources are utilized efficiently and local needs are adequately met.

USE CHATBOTS OR SCITE.AI'S ASSISTANT

Caveats:

- Test to see which one is best for your field
- Certain generative AI tools are multi-modal



WHERE DO YOU NEED HELP IN THE RESEARCH PROCESS

Is the terminology stumping you? **Do you need a research question?**
Do you need help developing a search string? How are you with finding relevant resources? Are you doing a literature review? How are you doing analyzing your data? Do you need an outline for your research paper?

DO YOU NEED A RESEARCH QUESTION?

What are the gaps in _____?

Suggest some research questions in
regards to _____?





Ask me another question

Ask



Where are the gaps in dielectrophoresis cell separation research



Dielectrophoresis (DEP) has emerged as a promising technique for cell separation, leveraging the differences in dielectric properties of cells to achieve high efficiency and specificity. However, despite its potential, there remain significant gaps in the research surrounding DEP cell separation that warrant further exploration.

One notable gap is the limited understanding of the dielectric properties of various cell types under different conditions. While studies such as those by Yildizhan et al. demonstrate effective separation of live and dead monocytes using DEP, they highlight that existing literature primarily focuses on specific cell lines, such as THP-1 monocytes, and lacks comprehensive studies on a wider variety of cell types (Yildizhan et al., 2017). This limitation restricts the generalizability of DEP techniques across different biological contexts. Furthermore, the dielectric properties of cells can vary significantly due to factors such as cell size, shape, and state (viable vs. non-viable), which complicates the optimization of DEP parameters for diverse applications (Mustafa et al., 2021), Yao et al., 2018).

Another critical gap is the scalability and integration of DEP systems into practical applications. Current research, including work by Mustafa et al., emphasizes the development of microfluidic chips for continuous DEP separation, yet these systems often face challenges related to throughput and operational stability in real-world settings (Mustafa et al., 2021). Moreover, while microfluidic devices have shown promise in laboratory settings, translating these technologies into clinical or industrial applications remains a significant hurdle due to issues such as device fouling, complex fabrication processes, and the need for robust control systems (Seki, 2024), Duncan & Davalos, 2021).

Additionally, there is a need for more comprehensive studies on the effects of external factors, such as temperature and fluid dynamics, on DEP performance. For instance, Seki's work on Joule heating in DEP devices indicates that temperature variations can significantly impact cell behavior and separation efficiency, yet this aspect is often overlooked in many studies (Seki, 2024). Understanding these interactions is crucial for optimizing DEP systems for specific applications, particularly in sensitive biological environments.

Moreover, while DEP has been successfully applied to separate various cell types, including tumor cells and platelets, the specificity of separation in heterogeneous populations remains a challenge. Research by Gascoyne and Shim highlights the potential of DEP for isolating circulating tumor cells, but the technique's effectiveness can be compromised by the presence of similarly sized and electrically similar cells (Gascoyne & Shim, 2014). This necessitates further investigation into enhancing the selectivity of DEP for complex mixtures, possibly through the integration of additional separation mechanisms or advanced electrode designs (Nan et al., 2023; AlShareef et al., 2013).

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References

Search Strategy

Copy

Export

"...To the best of our knowledge, there is only Shaflee and his co-worker's study related to the dielectrophoretic separation of ..." >>

Section: Discussion

Dielectrophoretic Separation of Live and Dead Monocytes Using 3D Carbon-Electrodes
Yağmur Yıldızhan¹, Nurdan Erdem², Monsur Islam³ et al, 2017 *Sensors*

61 | 0 | 69 | 1

[View PDF](#) [Add to dashboard](#) [Cite](#)

"...Among these methods, dielectrophoresis (DEP), a label-free separation technique that exploits the difference in dielectric pro..." >>

Section: Introduction

A flow-through microfluidic chip for continuous dielectrophoretic separation of viable and non-viable human T-cells

Adil Mustafa¹, Elisa Pedone², Lucia Marucci³ et al, 2021 *Electrophoresis*

11 | 0 | 6 | 0

[View PDF](#) [Add to dashboard](#) [Cite](#)

"...At the same time, the separation target is not only limited to cells, but also can be used to separate and purify nanoscale v..." >>

Section: Introduction

Microfluidic device embedding electrodes for dielectrophoretic manipulation of cells-A review

Jiafeng Yao¹, Gulping Zhu², Tong Zhao³ et al, 2018 *Electrophoresis*

57 | 0 | 48 | 0

[View PDF](#) [Add to dashboard](#) [Cite](#)

"...In particular, cell separation technologies based on dielectrophoresis (DEP) have attracted considerable interest because the..." >>

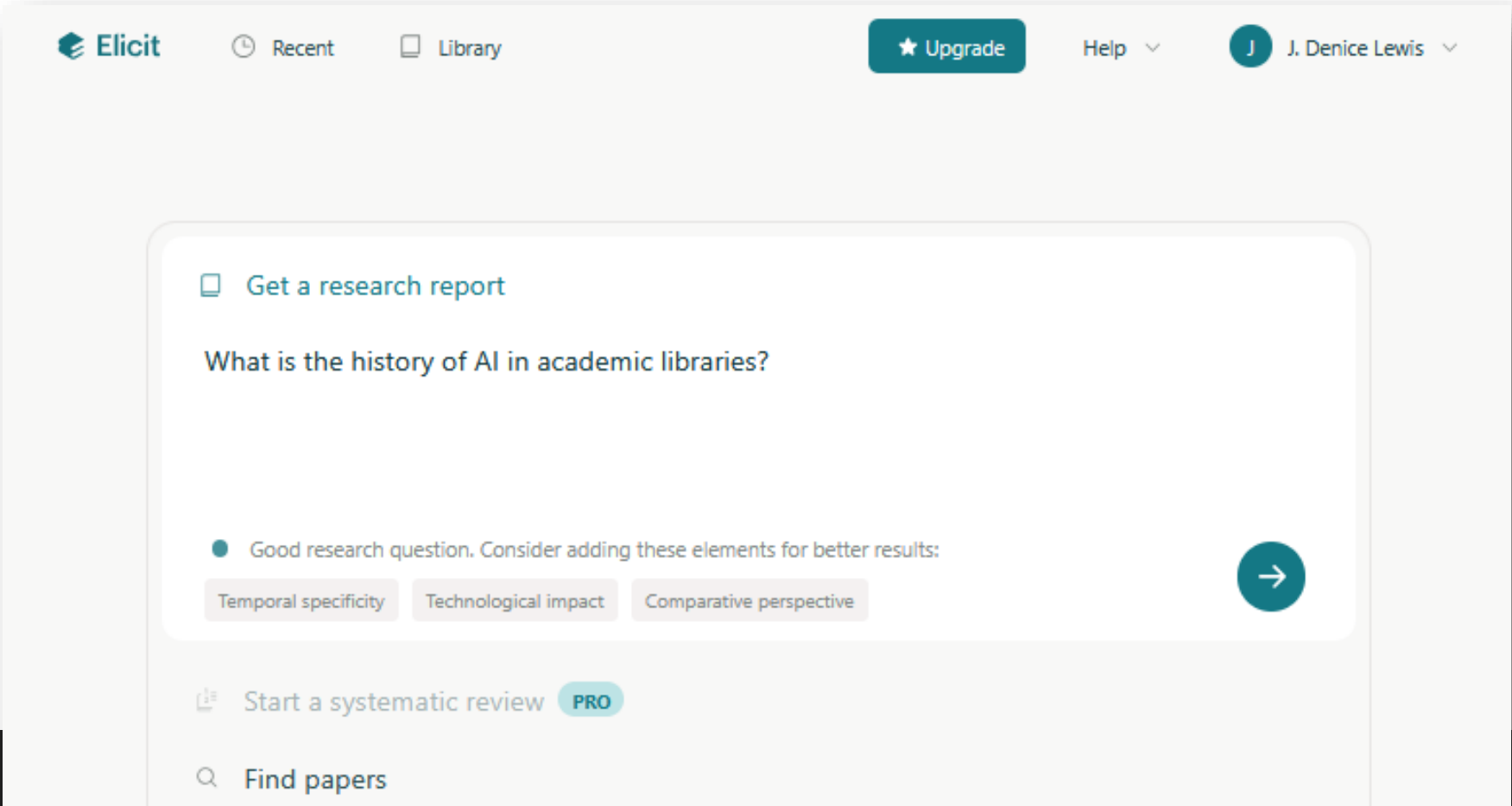
Section: Introduction

"...In particular, cell separation technologies based on dielectrophoresis (DEP) have attracted considerable interest because they are noninvasive to cells. In 12131, DEP is a



WRITE A RESEARCH QUESTION USING SCITE.AI

Free & \$



FINE TUNE A RESEARCH QUESTION USING **ELICIT.COM**

WHERE DO YOU NEED HELP IN THE RESEARCH PROCESS

Is the terminology stumping you? Do you need a research question? **Do you need help developing a search string?** How are you with finding relevant resources? Are you doing a literature review? How are you doing analyzing your data? Do you need an outline for your research paper?

KITCHEN SINK


Ask everything all at once . . .

I am researching Transaortic Transcatheter Aortic Valve Implantation Using Edwards SAPIEN. Can you write a search string for me that I can use in Web of Science, Google Scholar, Embase, and Scopus academic databases?

ChatGPT 4o ▾

⬆️ LE

I am researching Transaortic Transcatheter Aortic Valve Implantation Using Edwards SAPIEN. Can you write a search string for me that I can use in Web of Science, Google Scholar, Embase, and Scopus academic databases?




Sure! Here's a search string that you can use across various academic databases:

arduino

Copy code

```
("Transaortic Transcatheter Aortic Valve Implantation" OR "TAVI" OR "TAVR") AND ("
```

This search string covers the key aspects of your research, including the specific procedure, the device used, and various relevant outcome measures. You can modify it slightly based on the specific requirements or syntax of ↓ch database.

 Message ChatGPT

⬆️

ChatGPT can make mistakes. Check important info.

?

WRITE A SEARCH STRING USING A GENERATIVE AI TOOL

All have free
versions

Perplexity	("Transaortic" OR "Trans-aortic" OR "TAo") AND ("Transcatheter Aortic Valve Implantation" OR "TAVI" OR "Transcatheter Aortic Valve Replacement" OR "TAVR") AND ("Edwards SAPIEN" OR "SAPIEN" OR "SAPIEN 3" OR "SAPIEN 3 Ultra")
Gemini	(transaortic OR transapical) AND (TAVR OR "transcatheter aortic valve replacement") AND Edwards AND SAPIEN
Le Mistral Chat	("Transaortic Transcatheter Aortic Valve Implantation" OR "TA-TAVI" OR "Transaortic TAVI" OR "Transaortic TAVR" OR "TA-TAVR") AND ("Edwards SAPIEN" OR "SAPIEN valve" OR "Edwards Lifesciences SAPIEN")
Groq	<p>Web of Science:</p> <ul style="list-style-type: none"> (Transaortic OR TAVI) AND (Edwards SAPIEN OR SAPIEN) AND (aortic valve implantation OR aortic valve replacement) (Transaortic transcatheter aortic valve implantation) AND (Edwards SAPIEN OR SAPIEN) AND (clinical trial OR outcomes OR complications) <p>Google Scholar:</p> <ul style="list-style-type: none"> "Transaortic TAVI" AND "Edwards SAPIEN" AND ("aortic valve implantation" OR "aortic valve replacement") "Transaortic transcatheter aortic valve implantation" AND "Edwards SAPIEN" AND ("clinical trial" OR "outcomes" OR "complications") <p>Embase:</p> <ul style="list-style-type: none"> (Transaortic OR TAVI) AND (Edwards SAPIEN OR SAPIEN) AND (aortic valve implantation OR aortic valve replacement) AND (humans OR clinical trial) (Transaortic transcatheter aortic valve implantation) AND (Edwards SAPIEN OR SAPIEN) AND (complication OR outcome OR efficacy) <p>Scopus:</p> <ul style="list-style-type: none"> TITLE-ABS-KEY ("Transaortic TAVI" OR "TAVI transaortic") AND TITLE-ABS-KEY ("Edwards SAPIEN" OR "SAPIEN") AND TITLE-ABS-KEY ("aortic valve implantation" OR "aortic valve replacement") TITLE-ABS-KEY ("Transaortic transcatheter aortic valve implantation") AND TITLE-ABS-KEY ("Edwards SAPIEN" OR "SAPIEN") AND TITLE-ABS-KEY ("clinical trial" OR "outcomes" OR "complications")
Claude	(transaortic OR "direct aortic" OR TAo OR TAoTAVI) AND ("transcatheter aortic valve implantation" OR "transcatheter aortic valve replacement" OR TAVI OR TAVR) AND ("Edwards SAPIEN" OR SAPIEN OR "SAPIEN valve")
ChatGPT	("Transaortic Transcatheter Aortic Valve Implantation" OR "TAVI" OR "TAVR") AND ("Edwards SAPIEN" OR "Edwards SAPIEN XT" OR "Edwards SAPIEN 3") AND (outcomes OR efficacy OR safety OR "clinical trial" OR "patient outcomes" OR "procedural success" OR "complications" OR "long-term results")

WRITE A SEARCH STRING USING A GENERATIVE AI TOOL WEB OF SCIENCE RESULTS

<input type="checkbox"/> Search	("Transaortic" OR "Trans-aortic" OR "TAo") AND ("Transcatheter Aortic Valve Implantation" OR "TAVI" OR "Transcatheter Aortic Valve Replacement" OR "TAVR") AND ("Edwards SAPIEN" OR "SAPIEN" OR "SAPIEN 3" OR "SAPIEN 3 Ultra") (All Fields)	Web of Science Core Collection	110
Perplexity		Show editions ▼	
6:07 PM			
<input type="checkbox"/> Search	(transaortic OR transapical) AND (TAVR OR "transcatheter aortic valve replacement") AND Edwards AND SAPIEN (All Fields)	Web of Science Core Collection	92
Gemini		Show editions ▼	
6:06 PM			
<input type="checkbox"/> Search	("Transaortic Transcatheter Aortic Valve Implantation" OR "TA-TAVI" OR "Transaortic TAVI" OR "Transaortic TAVR" OR "TA-TAVR") AND ("Edwards SAPIEN" OR "SAPIEN valve" OR "Edwards Lifesciences SAPIEN") (All Fields)	Web of Science Core Collection	45
Le Mistral Chat		Show editions ▼	
6:05 PM			
<input type="checkbox"/> Search	(Transaortic OR TAVI) AND (Edwards SAPIEN OR SAPIEN) AND (aortic valve implantation OR aortic valve replacement) (All Fields)	Web of Science Core Collection	1,017
Groq		Show editions ▼	
6:04 PM			
<input type="checkbox"/> Search	(transaortic OR "direct aortic" OR TAo OR TAoTAVI) AND ("transcatheter aortic valve implantation" OR "transcatheter aortic valve replacement" OR TAVI OR TAVR) AND ("Edwards SAPIEN" OR SAPIEN OR "SAPIEN valve") (All Fields)	Web of Science Core Collection	118
Claude 3.5 Sonnet		Show editions ▼	
6:03 PM			
<input type="checkbox"/> Search	("Transaortic Transcatheter Aortic Valve Implantation" OR "TAVI" OR "TAVR") AND ("Edwards SAPIEN" OR "Edwards SAPIEN XT" OR "Edwards SAPIEN 3") AND (outcomes OR efficacy OR safety OR "clinical trial" OR "patient outcomes" OR "procedural success" OR "complications" OR "long-term results") (All Fields)	Web of Science Core Collection	735
ChatGPT 4.o		Show editions ▼	

WRITE A RESEARCH QUESTION USING A SCITE.AI'S ASSISTANT

↳ I am researching Transaortic Transcatheter Aortic Valve Implantation Using Edwards SAPIEN. Can you write a search string for me that I can use in Web of Science, Google Scholar, Embase, and Scopus academic databases?

To effectively search for literature on Transaortic Transcatheter Aortic Valve Implantation using the Edwards SAPIEN valve across various academic databases such as Web of Science, Google Scholar, Embase, and Scopus, the following search string can be utilized:

("Transaortic Transcatheter Aortic Valve Implantation" OR "TAo-TAVI" OR "Transcatheter Aortic Valve Replacement" OR "TAVR" OR "TAVI") AND ("Edwards SAPIEN" OR "Edwards SAPIEN XT" OR "Edwards SAPIEN 3") AND ("aortic stenosis" OR "aortic valve stenosis" OR "aortic valve insufficiency" OR "aortic regurgitation") AND ("outcomes" OR "complications" OR "safety" OR "efficacy" OR "cognitive function" OR "frailty" OR "quality of life")

Explanation of the Search String Components:

- Procedure Terms**: The search begins with terms related to the procedure itself, including "Transaortic Transcatheter Aortic Valve Implantation," "TAo-TAVI," "Transcatheter Aortic Valve Replacement," "TAVR," and "TAVI." This ensures that all relevant articles discussing the procedure are included.
- Device Specificity**: The inclusion of "Edwards SAPIEN," "Edwards SAPIEN XT," and "Edwards SAPIEN 3" targets studies that specifically evaluate the outcomes associated with this particular valve type.
- Clinical Context**: The terms "aortic stenosis," "aortic valve stenosis," "aortic valve insufficiency," and "aortic regurgitation" are included to capture the clinical conditions under which the procedure is performed.
- Outcome Measures**: Finally, the search string includes terms related to outcomes and complications such as "outcomes," "complications," "safety," "efficacy," "cognitive function," "frailty," and "quality of life" to ensure that studies evaluating the effectiveness and implications of the procedure are retrieved.

This comprehensive search string should yield a robust set of results relevant to your research on Transaortic Transcatheter Aortic Valve Implantation using Edwards SAPIEN valves.

↳ Ask a question... (type '/' for menu)

References Search Strategy



"...It is known that cognitive impairment is the strongest risk factor for postoperative delirium, which plays a vital role in en..." >>

Section: Discussion

Cognition, Frailty, and Functional Outcomes of Transcatheter Aortic Valve Replacement

Meera Kapadia¹, Sandra Shi², Jonathan Afילו³ et al. 2020

The American Journal of Medicine

5 | 0 | 12 | 0

[View full text](#) [Add to dashboard](#) [Cite](#)

"...Transcatheter aortic valve replacement (TAVR), also known as transcatheter aortic valve implantation (TAVI), being performed ..." >>

Section: Introduction

Transcatheter aortic valve replacement; a kidney's perspective

Wisit Cheungpasitporn¹, Kianoush Kashani² 2016 *J Renal Inj Prev*

47 | 1 | 44 | 0

[View full text](#) [Add to dashboard](#) [Cite](#)

"...All studies used either a transfemoral or transaxillary approach for TAVR. Additional file 4 shows the valve types used: three..." >>

Section: Results

Local versus general anesthesia for transcatheter aortic valve implantation (TAVR) – systematic review and meta-analysis

Georg Fröhlich¹, Alexandra J. Lansky², John G. Webb³ et al. 2014 *BMC Med*

148 | 4 | 101 | 2

[View full text](#) [Add to dashboard](#) [Cite](#)

"...Several previous studies have shown an association between moderate or severe paravalvular regurgitation and mortality after ..." >>

Section: Discussion

Five-Year Outcomes of Transcatheter or Surgical Aortic-Valve Replacement

WHERE DO YOU NEED HELP IN THE RESEARCH PROCESS

Is the terminology stumping you? Do you need a research question?

How are you with finding relevant resources?

Are you doing a literature review? How are you doing analyzing your data? Do you need an outline for your research paper?

Search term(s)

"information literacy" AND engineering

🔍

Search mode

^ All

All

Citation Statements

Metadata

[Advanced](#)

📄

🔗

🔔

⬇️

Authors ▾ Year ▾ Sections ▾ Types ▾ Citations ▾ Journal ▾ Affiliations ▾

Editorial Notice ▾ MeSH ▾ More

2,843 results (1.16 seconds)

[I don't understand these results](#)

Relevance ▾

“...The catalyst for launching the activities and course programmes in many German university libraries was a nationwide survey, the SteFI-Studie, in 2001, supported by the German Ministry of Research and Technology **(Klatt 2001)** . In 2013 most of the courses focused on library use and on particular catalogues and databases, but libraries also taught other topics such as general search strategies, internet search and search engines, information and reference management, electronic publishing, legal issues and ethical issues...”

📄 ...

Section: Information Literacy In Science and Politics

🕒 mentioning confidence: 99%

Teaching **information literacy** - Fabian Franke¹, Wilfried Sühl-Strohmenger² 2014 [JIL](#)

📄 3

✅ 0

🕒 2

❓ 0

➤ Add to dashboard

Cite

show abstract ...

Engineering Information Literacy and Communication

Deborah Messer¹ 2007 [The International Journal of Learning: Annual Review](#)

📄 8

✅ 0

🕒 3

❓ 0

➤ Add to dashboard

Cite

hide abstract ...

In this paper, we present some of the pedagogical outcomes of a study we undertook to determine whether research skills are valuable "soft skills" to have within an **Engineering** context, or whether they are merely "short-term competencies" as some would contend. We argue that **engineering** students (as future professionals) must develop two important-and confluent-skills: finding valid, complex technical information and translating it into a useful communication. As professionals, **engineers** must be able to find the information they need, assess it and apply it to their designs and to their communications. As students, they need to become acquainted with their professional discourse community, so we suggest that assigning a research paper in a field where applications and design exigencies are important is a worthwhile thing to do since this kind of research activity underpins students' future roles as professional **engineers** and promotes their lifelong learning. In the technical communication class offered in our school of **Engineering**, students learn how to engage in the systematic process of finding, selecting, organizing, distilling and presenting information, a process that enhances their comprehension of the subject, develops their critical thinking and introduces them to their discourse community.

SCITE.AI

LESSONS FROM

27

Free or \$

what is dielectrophoresis

- Searching more than 125 million academic papers
- Summarizing the first 4 abstracts
- Results

Summary of top 4 papers ▾

Copy

These papers collectively provide insights into the concept of dielectrophoresis. [Jesús-Pérez 2011](#) reviews the application of dielectrophoresis for monitoring microorganisms in environmental settings, highlighting its potential for water and air monitoring. [Ting 1971](#) demonstrates the use of dielectrophoresis to collect chloroplasts, while [Shalom 1987](#) discusses the theoretical aspects of multigradient dielectrophoresis for particle separation. [Chang 2005](#) introduces dielectrophoresis as a technique for manipulating micro/nano-sized particles and suggests potential research topics for control engineers. Overall, these papers contribute to our understanding of dielectrophoresis and its applications in various fields.

Sort: Most relevant

Filters

Export as ▾

UPGRADE



ELICIT.ORG > ELICIT.COM



Paper

Abstract summary

Manage Columns



Dielectrophoretic monitoring of microorganisms in environmental applications

Nadia M. Jesús-Pérez +1

Electrophoresis

2011 · 74 citations DOI

Dielectrophoresis plays an important role in biological information studies

Search or create a column

Describe the kind of data you want to extract

e.g. Limitations, Survival time



Dielectrophoresis of chloroplasts.

I P Ting +3

Biochimica et Biophysica Acta

1971 · 27 citations DOI

Chloroplasts can be collected on platinum electrodes by dielectrophoresis.

ADD COLUMNS

+ Summary

+ Main findings

+ Methodology

Particle separation by dielectrophoresis

Peter R. C. Gascoyne | Jody Vykoukal

Electrophoresis | [10.1002/1522-2683\(200207\)23:13<1973::aid-elps1973>3.0.co;2-1](https://doi.org/10.1002/1522-2683(200207)23:13<1973::aid-elps1973>3.0.co;2-1)

688

Cited By

61

Citing

2002

Published

Yes

Open Access

40,696

Papers in Graph

559,176

Citations in Graph

2

Graph Depth

Links: [Publisher](#) | [Full Text from LibKey](#)

Paper Filters ⓘ

Keywords

(hello AND world) NOT cruel

Min Distance



Max Distance



Min Year

2015

Max Year

2015

Filter

Add Papers to the Graph

Paper Title or DOI

Paper title, DOI, PubMed URL, or arXiv URL



or [Import BibTeX file](#)

Free



Click on the purple plus signs () to add the most interesting papers to the graph. We recommend that you **add at least five papers to the graph** in order to find the most relevant results. If the papers below don't seem relevant, **use the keyword filter** to find the ones which are.

[Learn More](#) →

INCITEFUL.XYZ

Gascoyne, 2002

Voldman, 2007

Liang, 2018 Liang, 2021

7/11/
Labeed, 2009



WHERE DO YOU NEED HELP IN THE RESEARCH PROCESS

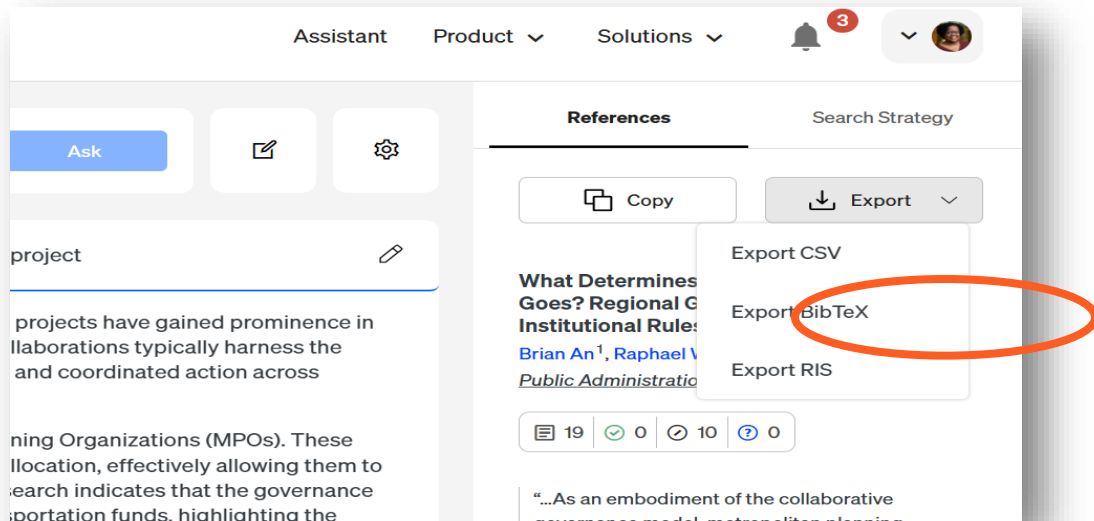
Is the terminology stumping you? Do you need a research question? How are you with finding relevant resources? **Are you doing a literature review?** How are you doing analyzing your data? Do you need an outline for your research paper?



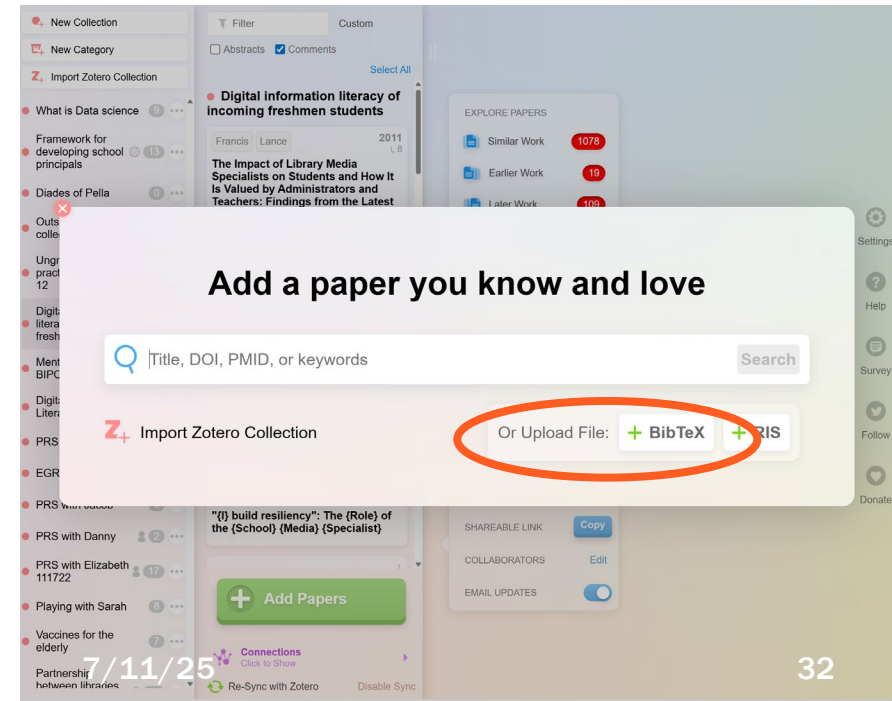
RESEARCH RABBIT

USING MULTIPLE AI TOOLS

1. EXPORT REFERENCES FROM SCITE.AI AS A BIBTEXT FILE



2. CREATE A COLLECTION IN RESEARCH RABBIT AND IMPORT THE FILE



WHERE DO YOU NEED HELP IN THE RESEARCH PROCESS

Is the terminology stumping you? Do you need a research question? How are you with finding relevant resources? Are you doing a literature review? **How are you doing analyzing your data?** Do you need an outline for your research paper?



lens-export Journal of Biomolecular St...
Spreadsheet



It looks like you've uploaded a file

It looks like you've uploaded a file named "lens-export Journal of Biomolecular Structure and Dynamics.csv." How can I assist you with this file?

what are the columns in the file



The file contains the following columns:

1. **Lens ID** - Unique identifier for the document.
2. **Title** - Title of the document.
3. **Date Published** - Date when the document was published.

CHATGPT 4.0



Message ChatGPT

7/11/25

34

Claude

New chat

Chats

Projects

Recents

Integrating AI into the Research P...

Integrating AI Tools into Research...

Revising a Recommendation Letter

Analyzing CSV data row count

Untitled

Implications of AI in Academic Re...

I'm researching Transaortic Tr...

Institutional Responses to the AI ...

Analyzing Mixed Qualitative and Q...

Transcribing Instagram Videos

What are the perceptions of acad... Institutional Responses to the AI Lan... ▾

JD

How many total responses are in the attached file?

To determine the total number of responses in the attached file, I'll need to count the number of rows in the dataset, excluding any header row. Let me do that for you.

After carefully reviewing the data, I can confirm that there are 106 total responses in the attached file. This count includes all the individual survey responses, excluding the header row that contains the column names.

JD

That is incorrect. There are 246 responses in the attached file. Is there a reason for the miscount?

I apologize for the error in my count. You are correct that there are 246 responses in the file, and I deeply regret providing inaccurate information. Thank you for bringing this to my attention.

There could be several reasons for this miscount:

- Partial data loading: It's possible that when I initially processed the file, only a portion of the data was loaded or visible to me, leading to an incomplete count.
- Scrolling or visibility issues: If there was an issue with how the data was presented to me, I might have only seen or counted a subset of the responses.
- Processing error: There could have been an error in how I processed or interpreted the data, causing me to miss a significant number of responses.
- Attention lapse: It's possible that I made a mistake in counting or keeping track of the total number of responses due to a lapse in attention or concentration.

Chat controls

Claude Sonnet 4

Smart, efficient model for everyday use [Learn more](#)

Artifacts

📄

AI Response Themes by Carnegie Classification

Click to open document • 1 version

Project content

🗨

What are the perceptions of academic librarians regarding AI?

Created by J Denice Lewis

Academic Librarians' Responses to the Evolving AI...

305 lines

CSV

Content

No content added yet

Add images, PDFs, docs, spreadsheets, and more to summarize, analyze, and query content with Claude.

LESSONS FROM AN ACADEMIC LIBRARIAN'S JOURNEY

7/11/25 35

CLAUDE.AI (CODING QUALITATIVE DATA)

WHERE DO YOU NEED HELP IN THE RESEARCH PROCESS

Is the terminology stumping you? Do you need a research question? How are you with finding relevant resources? Are you doing a literature review? How are you doing analyzing your data? **Do you need an outline for your research paper?**

Ask Anything

Summarize PDF/Doc

PDF

Document

Research Paper

PowerPoint

Spreadsheet

Summarize Video

YouTube

Video File

Summarize Text

Long Text

Emails

Summarize Webpage

Free or \$

Generate Image

Dielectrophoresis
Cell Separation
Research

MAPIFY.S0

Introduction to Dielectrophoresis

causing them to migrate toward regions of higher or lower electric field strength.

Importance in Cell Separation

DEP allows for high-resolution cell sorting without the need for chemical reagents.

It has applications in diagnostics, cancer research, and biotechnology, highlighting its versatility.

Mechanisms of Dielectrophoresis

Electrode Design

Various electrode configurations can be used, including interdigitated and ring electrodes.

The design affects field uniformity and the efficiency of cell manipulation.

Particle Behavior in Electric Fields

Cells exhibit positive or negative dielectrophoresis based on their dielectric properties.

The response depends on the frequency of the applied electric field, influencing separation outcomes.

Applications of Dielectrophoresis in Research

Medical Diagnostics

DEP can isolate specific cell types, such as cancer cells from blood samples.

This technique enhances the sensitivity and specificity of diagnostic tests.

Biotechnology and Bioengineering

Used in the development of cell-based assays and biosensors.

Provides a method for enriching target cells in complex biological samples, facilitating research.

Challenges and Limitations

Technical Challenges

Maintaining consistent electric field strength and uniformity is crucial for reproducibility.

The complexity of cell behavior under electric fields can complicate separation processes.

Biological Considerations

Variability in cell properties can affect DEP performance.

Addressing the effects of cell viability and stress during separation is essential for effective outcomes.

Advancements in Technology

Innovations in microfluidics and automation could enhance DEP applications.

↳ can you create an outline for a paper on dielectrophoresis cell separation research? 



Revised Outline for a Paper on Dielectrophoresis Cell Separation Research

I. Introduction

- A. Definition of Dielectrophoresis (DEP)
- B. Historical Context and significance in cell separation
- C. Overview of DEP applications in biomedical fields
- D. Purpose and objectives of the paper

II. Fundamentals of Dielectrophoresis

A. Principle of dielectrophoresis

1. Polarization effects in a nonuniform electric field
2. Dielectric properties of cells and their importance

B. Main parameters affecting DEP

1. Electric field strength and frequency
2. Cell size, shape, and conductivity

C. Types of DEP

1. Positive dielectrophoresis (pDEP)
2. Negative dielectrophoresis (nDEP)

III. Techniques and Methodologies

A. Device designs for DEP

1. Microfluidic devices and their benefits <!-- -->[20]()<!-- -->
2. Electrode configurations (e.g., interdigitated, coplanar) <!-- -->[21]()<!-- -->

B. Integration with microfluidics

"...The concept of dielectrophoresis for cell separation has been in use in biology for about two decades. The major application ..." >>

Section: Discussion

Separation of individual neurons using dielectrophoretic alternative current fields

Shalini Prasad¹, Xuan Zhang², Mo Yang³ et al. 2004

Journal of Neuroscience Methods

 44 |  2 |  46 |  0

[View PDF](#) [Add to dashboard](#) [Cite](#)

"...Further, it operates on (anticoagulated) whole blood, actually benefiting from physiological levels of hematocritthe same fa..." >>

Section: Results

Biomimetic Autoseparation of Leukocytes from Whole Blood in a Microfluidic Device

Sergey S. Shevkoplyas¹, Tatsuro Yoshida², Lance L. Munn³ et al. 2004 *Anal. Chem.*

 201 |  3 |  169 |  0

[View PDF](#) [Add to dashboard](#) [Cite](#)

"...[8] Dielectrophoresis (DEP), another active method, is based on the migration of dielectric microscale entities, such as micr..." >>

Section: Introduction

Microfluidics Based Magnetophoresis: A Review

Fadi Alnaimat¹, Sawsan Dagher², Bobby Mathew³ et al. 2018

The Chemical Record

 132 |  0 |  92 |  0


[View PDF](#) [Add to dashboard](#) [Cite](#)

SCITE.AI

Dielectrophoresis Cell Separation Research: Comprehensive Outline

I'd be happy to create an outline for a research paper on dielectrophoresis (DEP) cell separation. This technology has become increasingly important in biomedical research and clinical applications.





Comprehensive Outline for Dielectrophoresis Cell Separation Research Paper Document




I've created a comprehensive outline for a research paper on dielectrophoresis cell separation. The outline covers fundamental theory, device technologies, biomedical applications, methodological advances, analytical approaches, challenges, and future directions.

The structure progresses logically from basic principles to advanced applications and future perspectives, allowing you to present a complete picture of the field. Each section includes detailed subsections to ensure thorough coverage of relevant topics.

Would you like me to elaborate on any particular section of the outline? Or would you prefer recommendations on which aspects might be most valuable to emphasize based on current research trends in the field?

    Retry

 Claude can make mistakes. Please double-check responses.

1. Abstract

- Brief overview of dielectrophoresis (DEP) as a cell separation technique
- Summary of key findings and contributions
- Significance and implications of the research

2. Introduction

- Background and significance of cell separation in biomedical research and clinical applications
- Overview of dielectrophoresis principles and historical development
- Current challenges in cell separation technologies
- Research objectives and scope of the paper
- Thesis statement outlining the paper's central argument or contribution

3. Theoretical Background

3.1. Fundamentals of Dielectrophoresis


- Physical principles governing dielectrophoresis
- Mathematical models describing DEP force
- Positive vs. negative DEP
- Crossover frequency concept

3.2. Electrical Properties of Cells

- Cell membrane capacitance and conductance
- Cytoplasm electrical properties
- Factors affecting cellular dielectric response
- Cell modeling approaches (single-shell, multi-shell models)

3.3. DEP Spectra and Characteristic Signatures

- Clausius-Mossotti factor
- DEP force spectrum analysis
- Cell-specific DEP signatures
- Environmental factors affecting DEP response

 Absolutely! Here's an outline for a research paper on dielectrophoresis (DEP) cell separation, designed to be comprehensive and adaptable:

I. Introduction

- **A. Background:**
 - Briefly introduce cell separation and its importance in various fields (e.g., medicine, biotechnology).
 - Introduce dielectrophoresis as a label-free cell separation technique.
 - Highlight the advantages of DEP over other separation methods (e.g., FACS, magnetic separation).
- **B. Dielectrophoresis Fundamentals:**
 - Explain the basic principles of DEP: how non-uniform electric fields interact with cells.
 - Define positive and negative DEP.
 - Introduce the Clausius-Mossotti factor and its significance.
 - Explain the influence of frequency, conductivity, and cell properties.
- **C. Research Significance and Objectives:**
 - State the specific problem or gap in knowledge that the research addresses.
 - Clearly define the objectives of the research.
 - State the hypothesis of the research.

II. Theoretical Background

- **A. DEP Theory:**

WRITE AN OUTLINE OF A PAPER USING **GENERATIVE AI** (GEMINI & CLAUDE)

NOTE: The others outlined a research study

CAVEATS . . .

This is NOT a comprehensive list!

BUYER(USER) BEWARE!

- Do not share sensitive, confidential, and/or top-secret information!
- [Samsung](#)
- The dangers of AI
- [Gregory Hinton](#)
- Recommendation: Log in using an email address

ChatGPT

How we collect data



Conversations may be reviewed by our AI trainers to improve our systems.



Please don't share any sensitive information in your conversations.

Back

Next

ChatGPT

This is a free research preview.



Our goal is to get external feedback in order to improve our systems and make them safer.



While we have safeguards in place, the system may occasionally generate incorrect or misleading information and produce offensive or biased content. It is not intended to give advice.

Next

I need an AI tool to do X or a replacement!

- Use Google's related search term
 - related scite.ai
- Search for an alternative
 - alternate to chatgpt
- Look at the websites
 - <https://theresanaiforthat.com/>
 - <https://topai.tools/>
 - <https://www.producthunt.com/>
 - <https://github.com/best-of-ai/ai-directories>

THINGS TO KEEP IN MIND: USING AI FOR INSTRUCTION

Caveats when using generative AI as an instructor

. . .

Prompting matters!

I'm a librarian developing a new course "Integrating AI tools into the research process". The course will be held once a week on Wednesdays for an hour and 15 minutes during the Spring semester. There will be a total of 16 weeks. What topics should I cover for each week?

I'm the research and instruction librarian for engineering and science. I'm currently developing a course titled "Integrating AI tools into the research process." The course will be held once a week (16 total classes) for the full semester and each class is an hour and 15 minutes. At first, I'd like to assess where the students are e.g. how they currently conduct research in their particular field. Then, I want to have each step of the research process covered in a class session where we can review what AI tools can be used for that particular step. I'd also like to cover the ethics of using AI tools and have a class session for students to present a final project. Can you develop a schedule for the semester covering what should be covered in each class?

Act as an experienced senior instructional designer and develop a comprehensive course outline for a course titled 'Integrating AI tools into the research process'. This course is aimed at undergraduate students at a private university. Topics to cover would include understanding the research process, defining the different steps in the research process, understanding what AI tools can be used at each step of the research process, and learning how to ethically use AI tools when conducting research. There are 16 classes and each class is an hour and 15 minutes. The classes are interactive with small group discussions, demos of AI tools, and in class exercises.

- What information is needed in the prompt to create what you want?
- Input > Output
- Use [Prompt Engineer GPT](#) to improve your prompt

Which generative AI tool should you use?

[Claude](#)

[Perplexity.ai](#) (Change the focus to Writing)

[ChatGPT](#)

[scite.ai](#)'s Assistant

[Le Chat Mistral](#)

[Gemini](#)

[Microsoft Copilot](#)

[Groq](#) (It doesn't include a history of past chats.)

As of July 11, 2025...

CREATING A COURSE

Are you developing a course from scratch?

PROMPTS FOR COURSE CREATORS

<https://www.coursebox.ai/blog/best-chatgpt-prompts-for-course-creators>

LESSONS FROM AN ACADEMIC LIBRARIAN'S
JOURNEY

BEST CHATGPT PROMPTS FOR COURSE CREATORS



1 DESIGN A COURSE STRUCTURE "Act as an experienced senior instructional designer and develop a comprehensive course outline for a course titled '[Course Title]'. The course is aimed at '[Target Audience]'. The learning objectives for this course are '[Learning Objective 1]', '[Learning Objective 2]', and '[Learning Objective 3]'. Here are some key topics this course should cover: '[Key Topic 1]', '[Key Topic 2]', '[Key Topic 3]'."	2 PACKAGE AND BUNDLE COURSES "Propose a logical sequencing for the following courses in a bundle aimed at '[Target Audience]'. Here are the courses: '[Course 1, Course 2, Course 3]'."	3 GENERATE MARKETING CONTENT "Generate a marketing content strategy for the course titled '[Course Title]'. The target audience is '[Target Audience]'. We have a marketing budget of '\$ [Marketing Budget]'."
4 ENHANCE COURSE CONTENT "Suggest ways to enrich the content for our course titled '[Course Title]' for '[Target Audience]'. Here is a copy of the course content: '[Include link or document with the course content]'. The course should be interactive, engaging, and effective."	5 COLLECT COURSE EVALUATION AND FEEDBACK "Design a feedback form for the course titled '[Course Title]'. The form should collect (collective) input/feedback for the course. This feedback is for '[Target Audience]'. The course structure is as follows: '[Describe the course structure]'."	6 FACILITATE LEARNER COMMUNICATION "Draft a welcome message for the learners of the course titled '[Course Title]'. The message should foster a supportive learning environment."
7 REPURPOSE CONTENT INTO COURSE IDEAS "Transform the following blog posts into a micro-course outline: '[Blog Post 1, Blog Post 2, Blog Post 3]'."	8 DESIGN INTERACTIVE ACTIVITIES "Design an interactive activity for learners on the topic of '[Topic]'. The activity should align with the following lesson objectives: '[Lesson Objective 1]', '[Lesson Objective 2]'."	9 DEVELOP A LEARNER ENGAGEMENT STRATEGY "Propose a learner engagement strategy for the course titled '[Course Title]'. The strategy should include interactive activities and group discussions. The learners are '[Describe the typical characteristics of the learners]'."
10 WRITE A CAPTIVATING COURSE DESCRIPTION "Write a compelling course description for a course titled '[Course Title]'. The description should highlight the main features of the course, how someone will benefit from it, and why it stands out from other similar courses. The target audience is '[Describe the target audience]'."	11 DEVELOP A COURSE PRICING STRATEGY "Create a pricing strategy for a course titled '[Course Title]'. Please read the link to the course landing page: '[Course Landing Page Link]'. Consider factors such as the course's value, target audience, and market competition."	12 CREATE A COURSE LAUNCH PLAN "Develop a detailed plan for launching a course titled '[Course Title]'. The plan should include pre-launch, launch, and post-launch activities."
13 WRITE THE COPY FOR A COURSE LANDING PAGE "Design a compelling landing page for a course titled '[Course Title]'. The page should highlight the course's benefits, features, and unique selling points and be targeted to '[Describe the target audience]'."	14 WRITE QUIZ QUESTIONS "Write for a series of quiz questions and answers about '[Topic]' for a course titled '[Course Title]' for '[Learner Description]'. The quiz questions should be of '[Difficulty Level]'. Provide '[Number of Questions]' questions. Provide answers to choose from for each question. Only 1 answer should be correct, and all others should be false."	15 WRITE A PRACTICAL ASSIGNMENT QUESTION "Write a practical assignment question of '[Difficulty Level]' difficulty about '[Topic]' for a course titled '[Course Title]'. The assignment should be practical and hands-on to test the ability and understanding of '[Topic]'. The assignment should test their understanding of '[Topic]' comprehensively."
16 CREATE A COURSE SYLLABUS "Create a detailed syllabus for a course titled '[Course Title]'. The syllabus should outline the course's structure, content, learning objectives, and assessment methods."	17 DESIGN A COURSE CERTIFICATE "Design a certificate for a course titled '[Course Title]'. The certificate should include the course's name, the learner's name, and the date of completion."	18 CREATE A COURSE TRAILER SCRIPT "Write a script for a trailer video for a course titled '[Course Title]'. The script should highlight the course's features, benefits, and unique selling points."
19 DEVELOP A COURSE FAQ SECTION "Develop a FAQ section for a course titled '[Course Title]'. The FAQ section should address common questions and concerns about the course."	20 CREATE A COURSE FEEDBACK SURVEY "Create a feedback survey for a course titled '[Course Title]'. The survey should collect feedback on the course's content, delivery, and overall learner experience."	21 DESIGN A COURSE WORKBOOK "Design a workbook for a course titled '[Course Title]'. The workbook should include exercises, activities, and resources that complement the course's content."
22 CREATE A COURSE PROMOTION PLAN "Create a promotion plan for a course titled '[Course Title]'. The plan should include strategies for social media marketing, email marketing, and content marketing."	23 DEVELOP A COURSE RETENTION STRATEGY "Develop a retention strategy for a course titled '[Course Title]'. The strategy should include ways to keep learners engaged and motivated throughout the course."	24 CREATE A COURSE REFUND POLICY "Create a refund policy for a course titled '[Course Title]'. The policy should be fair and transparent, and it should protect both the course creator and the learners."
25 DESIGN A COURSE PROGRESS TRACKER "Design a progress tracker for a course titled '[Course Title]'. The tracker should help learners monitor their progress and stay motivated."	26 CREATE A COURSE WELCOME KIT "Create a welcome kit for learners who enroll in a course titled '[Course Title]'. The kit should include resources, tips, and information to help learners get started with the course."	27 DEVELOP A COURSE ACCESSIBILITY PLAN "Develop a plan to make a course titled '[Course Title]' accessible to all learners. The plan should address issues such as closed captions for videos, screen reader compatibility, and keyboard navigation."
28 CREATE A COURSE COMMUNITY STRATEGY "Create a strategy for building a community around a course titled '[Course Title]'. The strategy should include ways to foster interaction and engagement among learners."	29 DESIGN A COURSE COMPLETION BADGE "Design a badge that learners can earn upon completing a course titled '[Course Title]'. The badge should be visually appealing and represent the course's theme."	30 CREATE A COURSE UPDATE PLAN "Create a plan for updating and maintaining a course titled '[Course Title]'. The plan should ensure that the course's content stays relevant and up-to-date."

CREATE A COURSE SCHEDULE

(Claude.ai)

Act as an experienced senior instructional designer and develop a comprehensive course outline for a course titled 'Integrating AI tools into the research process'. This course is aimed at undergraduate students at a private university. Topics to cover would include understanding the research process, defining the different steps in the research process, understanding what AI tools can be used at each step of the research process, and learning how to ethically use AI tools when conducting research. There are 16 classes and each class is an hour and 15 minutes. The classes are interactive with small group discussions, demos of AI tools, and in class exercises.

Integrating AI Tools into the Research Process

Course Design Document

Course Overview

This 16-week undergraduate course introduces students to the strategic integration of AI tools throughout the research process. Through interactive sessions, hands-on practice, and collaborative learning, students will develop skills to enhance their research capabilities while maintaining academic integrity.

Learning Objectives

By the end of this course, students will be able to:

1. Map the steps of the research process
2. Evaluate appropriate AI tools for each research stage
3. Apply AI tools effectively to enhance research quality
4. Demonstrate ethical decision-making in AI tool usage
5. Create a personalized AI-enhanced research workflow

Course Structure

Duration: 16 weeks

Session Length: 75 minutes

Format: Blended learning with in-person interactive sessions

Weekly Session Breakdown

Week 1: Course Introduction & Research Process Foundations

Learning Objectives:

- Identify personal research experience and needs
- Recognize the steps in the research process

Activities:

- Pre-course survey (15 min)

Week 3: Research Ethics and AI Integration

Learning Objectives:

- Understand ethical considerations
- Apply university AI policies

Activities:

- Case study analysis in groups (25 min)
- Ethics scenario role-play (25 min)
- Policy review discussion (25 min)

Assessment:

- Ethics case analysis submission

Week 4: Topic Selection and Refinement

Learning Objectives:

- Use AI tools for topic exploration
- Evaluate topic feasibility

Activities:

- Demo: AI brainstorming tools (20 min)
- Practice: Topic generation with AI (30 min)
- Peer feedback sessions (25 min)

Assessment:

- Topic proposal with AI assistance documentation

Week 5: Literature Search Strategies

Learning Objectives:

- Enhance search strategies with AI

CREATE LEARNING OBJECTIVES

(Perplexity.ai, Writing focus,
November 1, 2024)

using the ala framework
(<https://www.ala.org/acrl/standards/ilframework>), what learning
objectives should I consider for my
course "integrating ai into the
research process"?

Answer

Based on the ACRL Framework for Information Literacy for Higher Education, here are some relevant learning objectives you could consider for your course "Integrating AI into the Research Process":

1. From "Authority Is Constructed and Contextual":
 - Evaluate the authority and credibility of AI-generated information and AI tools used in research.
 - Recognize the potential biases in AI systems and how they may impact research outcomes.
 - Understand the role of human expertise in conjunction with AI in the research process.
2. From "Information Creation as a Process":
 - Articulate how AI tools fit into the information creation and research process.
 - Assess the capabilities and constraints of AI-generated information in research contexts.
 - Understand how AI impacts traditional and emerging processes of information creation and dissemination in various disciplines.
3. From "Information Has Value":
 - Recognize the economic and ethical implications of using AI in research, including issues of intellectual property and data privacy.
 - Understand how AI might influence access to information and scholarly publishing practices.
4. From "Research as Inquiry":
 - Formulate research questions that effectively leverage AI tools and capabilities.
 - Develop search strategies that combine traditional research methods with AI-assisted techniques.
 - Analyze and synthesize information from both human-generated and AI-generated sources.
5. From "Scholarship as Conversation":
 - Understand how AI is changing the nature of scholarly communication and debate.
 - Recognize the importance of citing and attributing AI-generated content appropriately in academic work.

CREATE A RUBRIC

ChatGPT, Auto

Create a rubric for the learning objective "Develop strategies to use AI effectively for information retrieval, including optimizing prompts, filtering results, and iterating searches to achieve deeper research insights."

Criteria	Excellent (4)	Proficient (3)	Developing (2)	Beginning (1)
Prompt Optimization	Consistently crafts precise, nuanced prompts; effectively leverages advanced AI query features (e.g., Boolean, modifiers) to achieve specific research insights.	Uses well-defined prompts with some refinement, showing a good understanding of how prompt phrasing impacts AI outputs.	Prompts are clear but lack specificity or refinement, often resulting in only general or partially relevant results.	Uses unclear or overly broad prompts that lead to mostly irrelevant or superficial results; lacks refinement strategies.
Filtering Results	Skillfully applies filters to narrow results effectively, demonstrating an ability to discern relevant information quickly.	Applies filters to refine results with some accuracy, though may miss certain opportunities to exclude less relevant data.	Uses basic filters but inconsistently, sometimes overlooking opportunities for refining searches or missing key details.	Shows little to no attempt to use filters effectively, resulting in unfocused or unfiltered results.
Iterating Searches	Demonstrates a clear strategy for iterating searches, adjusting prompts, filters, and search methods to improve relevance and depth continuously.	Iterates searches with some strategic adjustments that improve results, showing understanding of iterative refinement.	Attempts to iterate searches but lacks a clear strategy; adjustments lead to minor improvements or remain inconsi	Shows no meaningful attempts to iterate or refine searches; results remain static and lack

Depth of Research Insights	Consistently extracts deep, insightful, and nuanced information, demonstrating a comprehensive understanding of the subject.	Extracts relevant insights that contribute to understanding, with occasional deep or nuanced findings.	Extracts basic insights but lacks depth; results are often general or tangential to the research question.	Struggles to extract relevant insights; results are shallow or irrelevant to the research question.
Documentation of Strategy	Thoroughly documents the search process, explaining prompt choices, filtering techniques, and iterative steps with clear reasoning for each.	Provides a coherent record of the search process, explaining most choices and adjustments reasonably well.	Provides limited documentation of the search process, with minimal explanation of choices and few iterative steps.	Lacks documentation or fails to explain prompt choices, filters, or search adjustments.

CREATE A SYLLABUS

(Claude, 4/10/25)

Can you create a syllabus?
There are 16 weeks in the course. I will be using Canvas to teach the online course asynchronously.

Leveraging AI for Undergraduate Research

Share

Can you create a syllabus? There are 16 weeks in the course. I will be using Canvas to teach the online course asynchronously.

Syllabus: Integrating AI Tools into the Research Process

Course Information

- **Course Title:** Integrating AI Tools into the Research Process
- **Course Duration:** 16 Weeks
- **Format:** Online, Asynchronous (via Canvas)
- **Level:** Undergraduate

Course Description

This course introduces undergraduate students to the effective integration of artificial intelligence tools throughout the research process. Students will learn to evaluate, select, and implement various AI technologies to enhance their research capabilities while maintaining academic integrity. The course covers AI applications in literature review, data collection and analysis, content generation, and addresses ethical considerations in AI-assisted research.

Learning Outcomes

By the end of this course, students will be able to:

1. Evaluate and select appropriate AI tools based on specific research needs
2. Implement AI tools effectively at different stages of the research process
3. Critically assess limitations, biases, and ethical implications of AI in research
4. Create a research project that thoughtfully integrates AI tools while maintaining academic integrity

Required Materials

Assessment and Grading

Component	Percentage
Weekly Assignments and Activities	30%
Discussion Participation	15%
Midterm Project	20%
Final Research Project	30%
Reflection Portfolio	5%

Course Policies

Participation Expectations

Students are expected to log in regularly and participate in all course activities. While the course is asynchronous, maintaining consistent engagement with the material and peers is essential.

Late Work Policy

Assignments submitted up to 48 hours late will receive a 10% penalty. Assignments more than 48 hours late will receive a 25% penalty. No assignments will be accepted after 7 days unless prior arrangements have been made.

Academic Integrity and AI Use

This course specifically addresses the use of AI in academic work. Students are expected to follow the ethical guidelines discussed in the course and properly document all AI assistance. Undisclosed use of AI tools for assignments that are meant to demonstrate personal mastery will be considered an academic integrity violation.

USING AI TO DEVELOP ASSESSMENTS

When you're looking for a variety of formative and summative assessments . . .



CREATE ASSESSMENTS FROM A PROMPT

(Gemini, 4/10/25)

Act as if you're an experienced senior instructional designer. I'm developing an assessment for an asynchronous online course for undergraduate students. The learning objective is "Evaluate AI outputs for credibility and reliability." What formative and summative assessments would you recommend

LESSONS FROM AN ACADEMIC LIBRARIAN'S JOURNEY

Gemini
2.5 Pro (experimental)



here are my recommendations:

I. Formative Assessments (Low Stakes, Practice & Feedback Focused)

These should happen *during* the learning module, allowing students to practice applying evaluation criteria and receive feedback before a graded assessment.

1. Guided Checklist/Rubric Application:
 - **Activity:** Provide students with a relatively short AI-generated text (e.g., a summary of a recent news event, a definition of a scientific concept – potentially one with known subtle flaws). Also provide a predefined checklist or simple rubric outlining key criteria for credibility and reliability (e.g., presence of citations, factual accuracy markers, neutrality of tone, logical consistency, potential bias indicators).
 - **Task:** Students use the checklist/rubric to analyze the provided text and identify strengths/weaknesses related to credibility. They might answer specific short-answer questions keyed to the items (e.g., "Does the output cite sources? If so, are they credible?"). "Identify one statement you would want to fact-check and why.").
 - **Rationale:** Provides scaffolding, focuses attention on specific criteria learned, allows for targeted practice. Feedback can be provided using LMS quiz tools for parts), peer-based using the rubric, or via instructor-provided model answers/feedback.
2. Discussion Forum: Comparative Judgment:

II. Summative Assessments (Higher Stakes, Measuring Mastery)

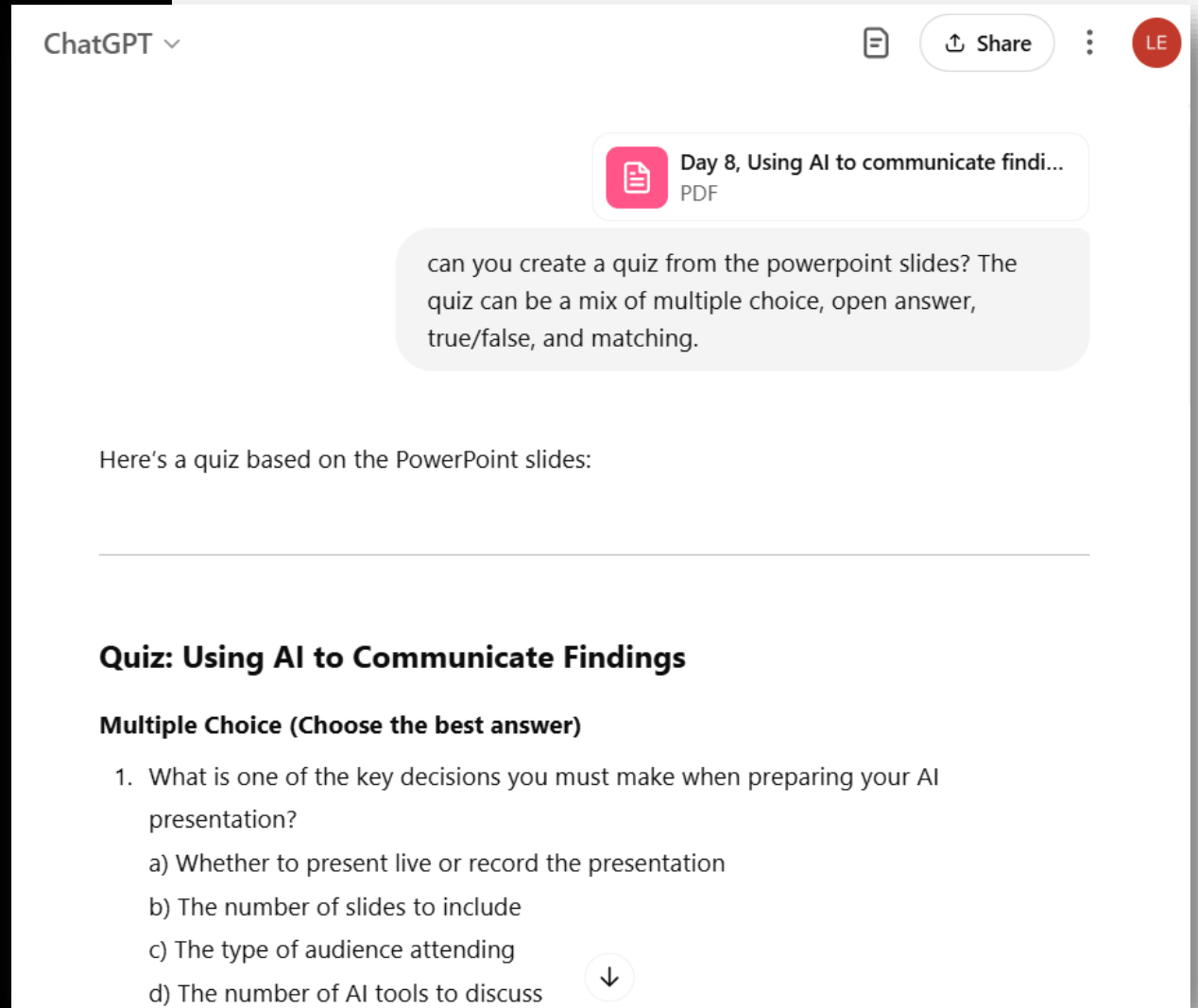
These typically come at the end of a module or unit to gauge whether the student has achieved the learning objective.

1. Critical Evaluation Report:
 - **Activity:** Provide students with a more substantial, novel AI-generated text (e.g., a 500-word explanation of a complex topic relevant to their potential fields of study, a draft section of a research paper). Ensure the text has a mix of plausible information and potential credibility/reliability issues.
 - **Task:** Students write a structured report (e.g., 1-2 pages) evaluating the provided text. The report should:
 - Summarize the AI output's main points.
 - Systematically assess its credibility and reliability using specific criteria learned in the course (referencing accuracy, sourcing, bias, coherence, etc.).
 - Identify specific examples from the text to support their evaluation.
 - Conclude with an overall judgment on the trustworthiness of the output for academic purposes and suggest necessary verification steps.
 - **Grading:** Use a detailed analytic rubric assessing the depth of analysis, application of criteria, use of evidence, and clarity of writing.

CREATE A QUIZ FROM POWERPOINT SLIDES

(ChatGPT, 4/2/25)

Can you create a quiz from the PowerPoint slides? The quiz can be a mix of multiple choice, open answer, true/false, and matching.



USING GENERATIVE AI TO CREATE IMAGES

I just need an image for . . .

MIDJOURNEY

<https://www.midjourney.com/>

MJ

I am presenting on the topic "Practical AI: Lessons from an Academic Librarian's Journey" and would like an image for the first slide. The image should picture a black librarian with an ai overlay. Don't include any words in the image. The title will be separately on the page.

finding scholarly resources in the library, futuristic

v 6.1

24 Feb 2025

image to put on the flyer for the webinar "Alternatives to Web of Science: Access is the spice of STEM life"

v 6.1

9 Nov 2024

students on wfu campus with an ai overlay

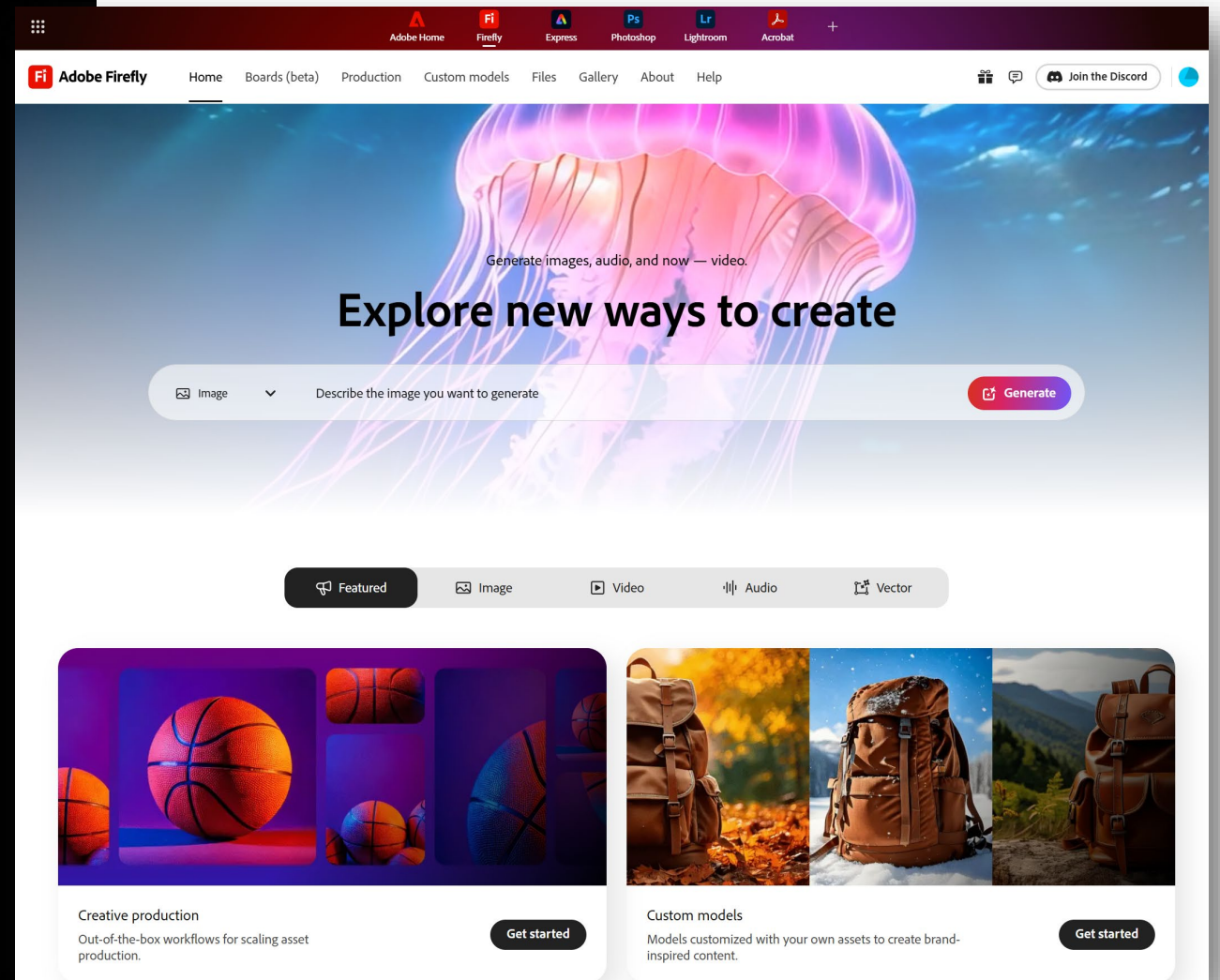
v 6.1

students on wfu campus using ai with an ai overlay

v 6.1

ADOBE FIREFLY

<https://firefly.adobe.com/>



DENICE'S \$0.02

- Determine your AI lane
 - What are your pain points?
 - Where do you need to save time?
- Use the right tool for a specific purpose
- Spend time experimenting with the tool and determine how you're going to keep up with the continuing changes

Q & A

Any questions?

THANK YOU!



J. Denice Lewis

lewisjd@wfu.edu

ZSR Library:

<https://zsr.wfu.edu/directory/denice-lewis/>

LinkedIn:

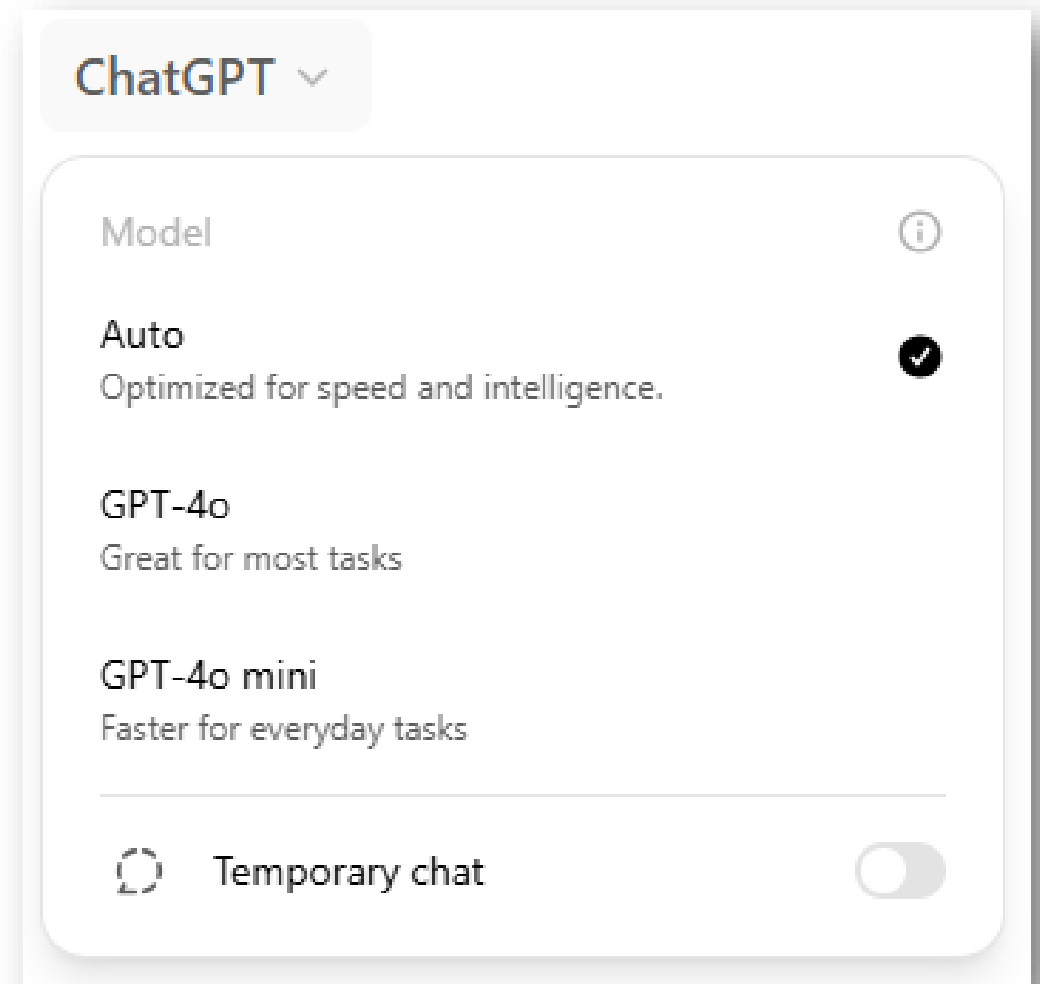
<https://www.linkedin.com/in/jdenicelewis/>

REVISING A COURSE

Are you comfortable uploading documents?

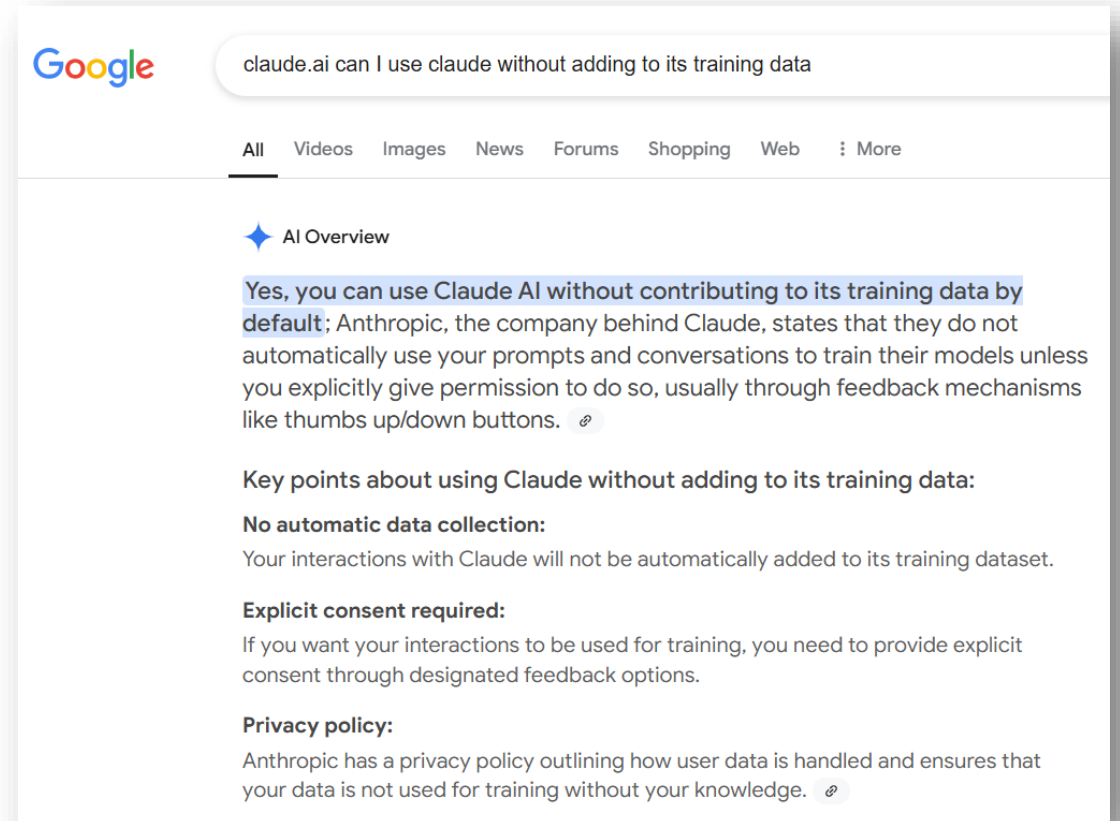
CHATGPT

Use **Temporary chat**



CLAUDE

‘Anthropic prioritizes privacy



The screenshot shows a Google search interface. The search bar contains the text "claude.ai can I use claude without adding to its training data". Below the search bar, the "All" tab is selected. The search results show a section titled "AI Overview" with a blue star icon. The main text of the overview states: "Yes, you can use Claude AI without contributing to its training data by default; Anthropic, the company behind Claude, states that they do not automatically use your prompts and conversations to train their models unless you explicitly give permission to do so, usually through feedback mechanisms like thumbs up/down buttons." Below this, there are three key points: "No automatic data collection:", "Explicit consent required:", and "Privacy policy:". Each key point is followed by a brief explanation.

Google

claude.ai can I use claude without adding to its training data

All Videos Images News Forums Shopping Web : More

◆ AI Overview

Yes, you can use Claude AI without contributing to its training data by default; Anthropic, the company behind Claude, states that they do not automatically use your prompts and conversations to train their models unless you explicitly give permission to do so, usually through feedback mechanisms like thumbs up/down buttons.

Key points about using Claude without adding to its training data:

No automatic data collection:
Your interactions with Claude will not be automatically added to its training dataset.

Explicit consent required:
If you want your interactions to be used for training, you need to provide explicit consent through designated feedback options.

Privacy policy:
Anthropic has a privacy policy outlining how user data is handled and ensures that your data is not used for training without your knowledge.