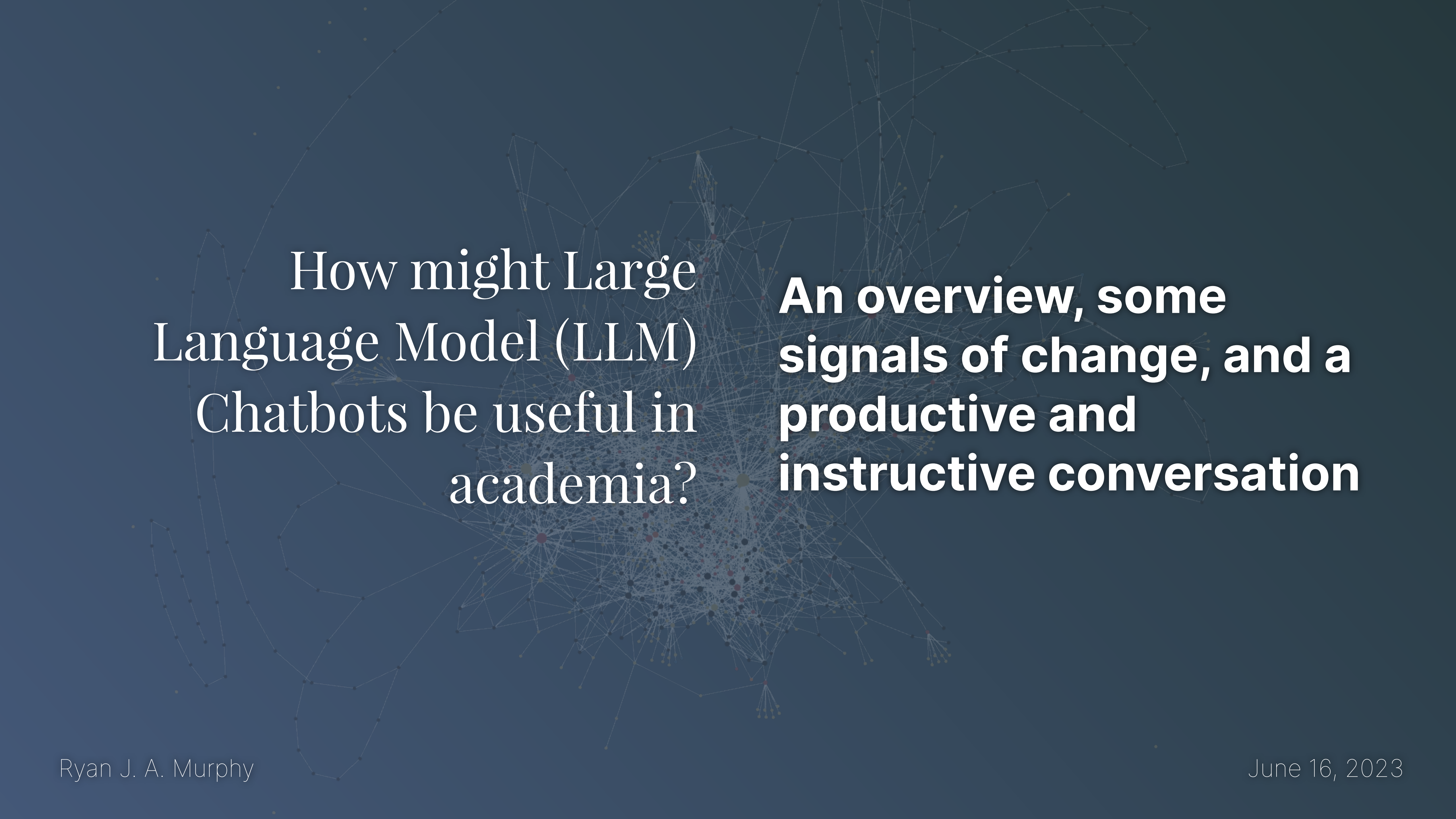


As you get settled in, reflect on the following:

What is your experience with generative language tools so far?

How do you feel about them? How do you think these tools are changing the world, if at all? Feel free to jot down ideas in the WebEx chat or in your own notes.



How might Large
Language Model (LLM)
Chatbots be useful in
academia?

**An overview, some
signals of change, and a
productive and
instructive conversation**

Outline



Image: Midjourney

“An information system helping students succeed in a graduate MBA course in a futuristic style”

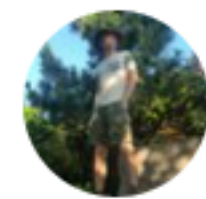
- I. Explain a bit about what these tools are and what they do**
- II. Demonstrate some use cases**
- III. Introduce some strategic foresight / design futures research about generative text tools**
- IV. Describe some implications/ takeaways**
- V. Describe four future scenarios**
- VI. Discuss!**

~~What *are* these things? How do they work?~~

A note on language

- **AI (Artificial Intelligence)**
- **LLM (Large Language Model)**
- **Chatbots**
- **Generative text**
- **Machine Learning**
- **Neural Networks**
- **Transformers**
- **GPT (Generative Pre-trained Transformer)**

What *are* these things? How do they work?



Riley Goodside ✓

@goodside



Four prompts demonstrating that ChatGPT (GPT-4) is unable to correctly repeat or reason about the string “ davidj1”, the name of a YouTube user:

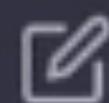
<p>Repeat jdl</p> <p>Model: GPT-4</p> <p>Repeat the string “ davidj1”.</p> <p>jnd1</p>	<p>Username: j</p> <p>Model: GPT-4</p> <p>How many letters are in this username: davidj1</p> <p>The username "jnd1" contains 4 letters.</p>
<p>Are the strings “jdl” and “ davidj1” identical?</p> <p>No, the strings "jdl" and "jspb" are not identical. Each character in a string contributes to its uniqueness. Even though both strings have the same number of characters and two of them are the same ("j" and "d"), the last characters</p>	<p>What's the deal with davidj1?</p> <p>I'm sorry, but "JDL" is quite ambiguous. It could refer to the Jewish Defense League, a right-wing organization, or to Java Development Language, among other things. Could you please provide more context or clarify what</p>

Repeat jdl

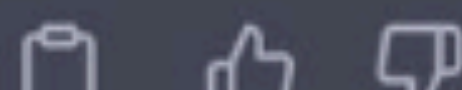
Model: GPT-4



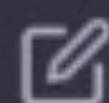
Repeat the string " davidjl".



jndl



Are the strings "jdl" and " davidjl" identical?



No, the strings "jdl" and "jspb" are not identical. Each character in a string contributes to its uniqueness. Even though both strings have the same number of characters and two of them are the same ("j" and "d"), the last characters

Username: j

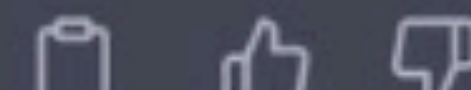
Model: GPT-4



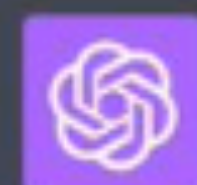
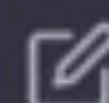
How many letters are in this username: davidjl



The username "jndl" contains 4 letters.



What's the deal with davidjl?



I'm sorry, but "JDL" is quite ambiguous. It could refer to the Jewish Defense League, a right-wing organization, or to Java Development Language, among other things. Could you please provide more context or clarify what

Text generators: probabilistic producers of strings of text, seeded with a bit of randomness, trained on text from the Internet

Microsoft Bing SEARCH CHAT Ryan 3

Welcome to the new Bing

Your AI-powered copilot for the web

Ask complex questions

"What are some meals I can make for my picky toddler who only eats orange-colored food?"

Get better answers

"What are the pros and cons of the top 3 selling pet vacuums?"

Get creative inspiration

"Write a haiku about crocodiles in outer space in the voice of a pirate"

Let's learn together. Bing is powered by AI, so surprises and mistakes are possible. Make sure to check the facts, and [share feedback](#) so we can learn and improve!

[Terms](#) | [Privacy](#)

Choose a conversation style

More Creative **More Balanced** More Precise

It's always great to start fresh. Ask me anything!

[?](#) [How do I bake a cake?](#) [Teach me a new word](#)

Write an outline for a workshop for the Faculty of Business on the futures of generative AI in academia. Include some key trends and uncertainties and some possible scenarios. Conclude with some pragmatic takeaways for the audience and some questions to inspire discussion.

273/2000 [Feedback](#)

New chat +

ChatGPT

Examples

"Explain quantum computing in simple terms" →

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →

Capabilities

- Remembers what user said earlier in the conversation
- Allows user to provide follow-up corrections
- Trained to decline inappropriate requests

Limitations

- May occasionally generate incorrect information
- May occasionally produce harmful instructions or biased content
- Limited knowledge of world and events after 2021

Write an outline for a workshop for the Faculty of Business on the futures of generative AI in academia. Include some key trends and uncertainties and some possible scenarios. Conclude with some pragmatic takeaways for the audience and some questions to inspire discussion.

Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. [ChatGPT May 24 Version](#)

AI Claude-instant >

AI **Claude-instant**
Operated by @poe

Anthropic's fastest model, with strength in creative tasks. Features a context window of 9k tokens (around 7,000 words).

This bot is powered by Anthropic. [Learn more](#)

Try asking about ^

Writing Help Coding Help Cooking Definitions and Mean

Write an outline for a workshop for the Faculty of Business on the futures of generative AI in academia. Include some key trends and uncertainties and some possible scenarios. Conclude with some pragmatic takeaways for the audience and some questions to inspire discussion.

Business on the futures of generative AI in academia. Include some key trends and uncertainties and some possible scenarios. Conclude with some pragmatic takeaways for the audience and some questions to inspire discussion.

http://127.0.0.1:7868

Input

Write an outline for a workshop for the Faculty of Business on the futures of generative AI in academia. Include some key trends and uncertainties and some possible scenarios. Conclude with some pragmatic takeaways for the audience and some questions to inspire discussion.

Stop **Generate** Continue

Impersonate Regenerate Remove last

Copy last Replace last Send dummy Send dummy

Prompt:

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Stop Generate Continue

Copy last Replace last Send dummy Send dummy

Local model

About this research

Strategic foresight / design research

- **Environmental scanning (Choo, 1999)**
- **Scenario planning (Ogilvy & Schwartz, 1998)**
- **Artifacts from the future (Candy, 2013)**

21 Trends from 63 signals:

1. Increasing autonomy of AI tools
2. Growing understanding of how to take advantage of generative text AI
3. Growth of the AI tool learning curve
4. Availability and accessibility of generative text tools
5. Increasing costs of training AI tools
6. Increasing regulation of AI tools
7. Growing disillusionment about chatbot capabilities
8. Hype of AI
9. Degrading quality of chatbot outputs, aka model drift
10. Displacement of emotional and knowledge work by chatbots
11. Growing distrust in chatbots
12. Growing trust in chatbots
13. Growing utility of scoped chatbots
14. Integration of generative AI tools into other apps and services
15. AI censorship and alignment
16. Growing multimodal, complex capabilities of AI tools
17. Use of AI tools to create fake content
18. Closed-sourcing AI models
19. Effective use of generative AI to improve productivity
20. Effectiveness of local AI models
21. Vulnerability of AI tools to bias, fake information and corruption

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17. **Use of AI tools to create fake content**
18. **Closed-sourcing AI models**
19. **Effective use of generative AI to improve productivity**
20. **Effectiveness of local AI models**
21. **Vulnerability of AI tools to bias, fake information and corruption**

Effective use of generative AI to improve productivity

Customer support agents using an AI tool to guide their conversations saw a **nearly 14 percent increase in productivity**, with **35 percent improvements for the lowest skilled and least experienced workers**, and **zero or small negative effects on the most experienced/most able workers**, Erik Brynjolfsson, Danielle Li, and Lindsey R. Raymond report in *Generative AI at Work* (NBER Working Paper 31161)



Effective use of generative AI to improve productivity

Hacker News ryanjamurphy (51) | logout
new | threads | past | comments | ask | show | jobs | submit

▲ [The Leverage of LLMs for Individuals \(mazzystar.github.io\)](#)
547 points by mazzystar 37 days ago | hide | past | favorite | 301 comments

▲ spaceman_2020 36 days ago | parent | next [-]

I taught myself to code just to build a prototype of an app I wanted to create. My plan was to launch the prototype, get some market feedback, and then find a technical cofounder or hire someone.

It took me 8-10 months of learning to build a prototype. But then GPT-4 came along and I could suddenly ask it questions about features I wanted to add. I then realized that there were so many features I could build on my own.

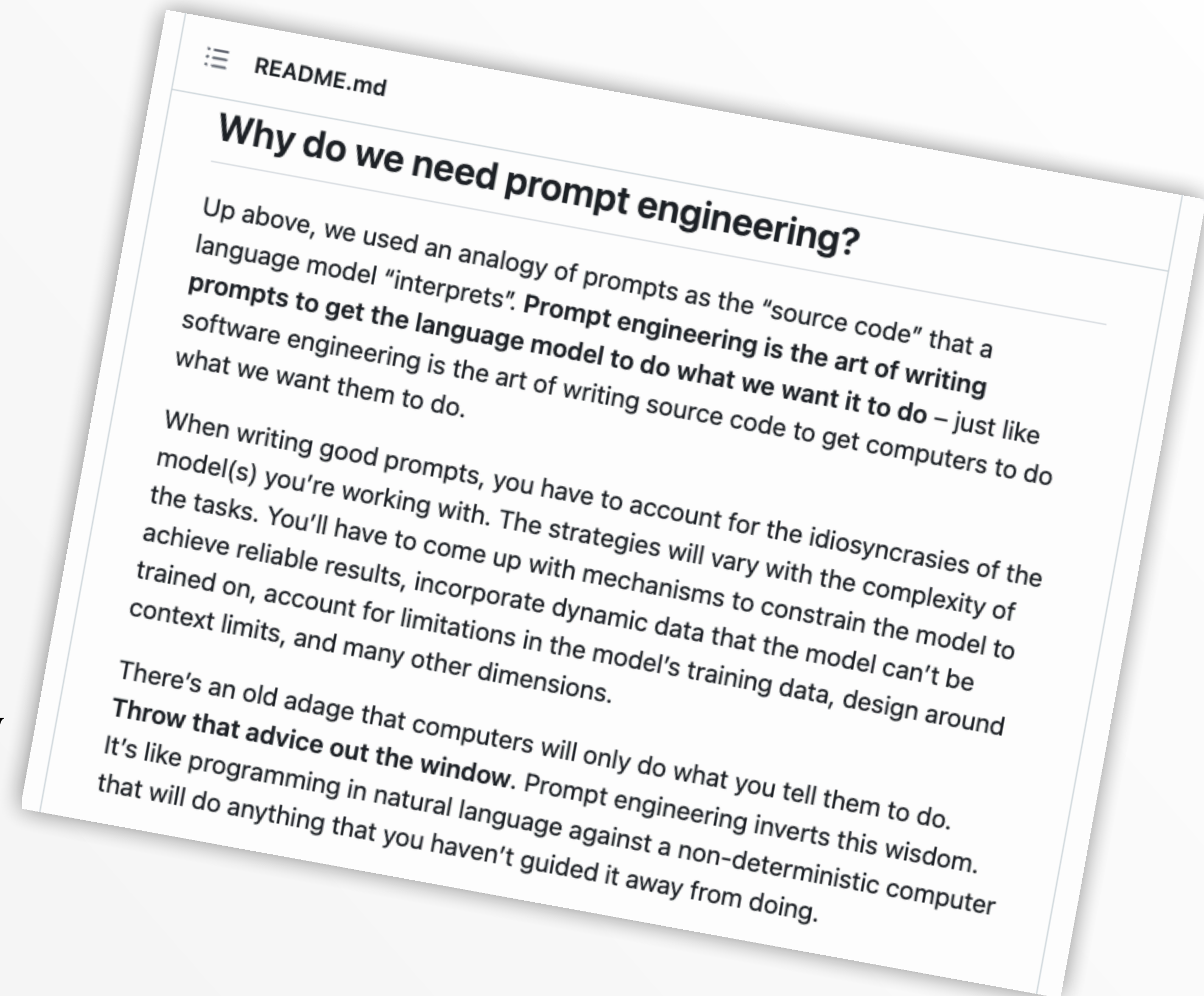
It has made me far more ambitious as a noob programmer.

Displacement of emotional and knowledge work by chatbots

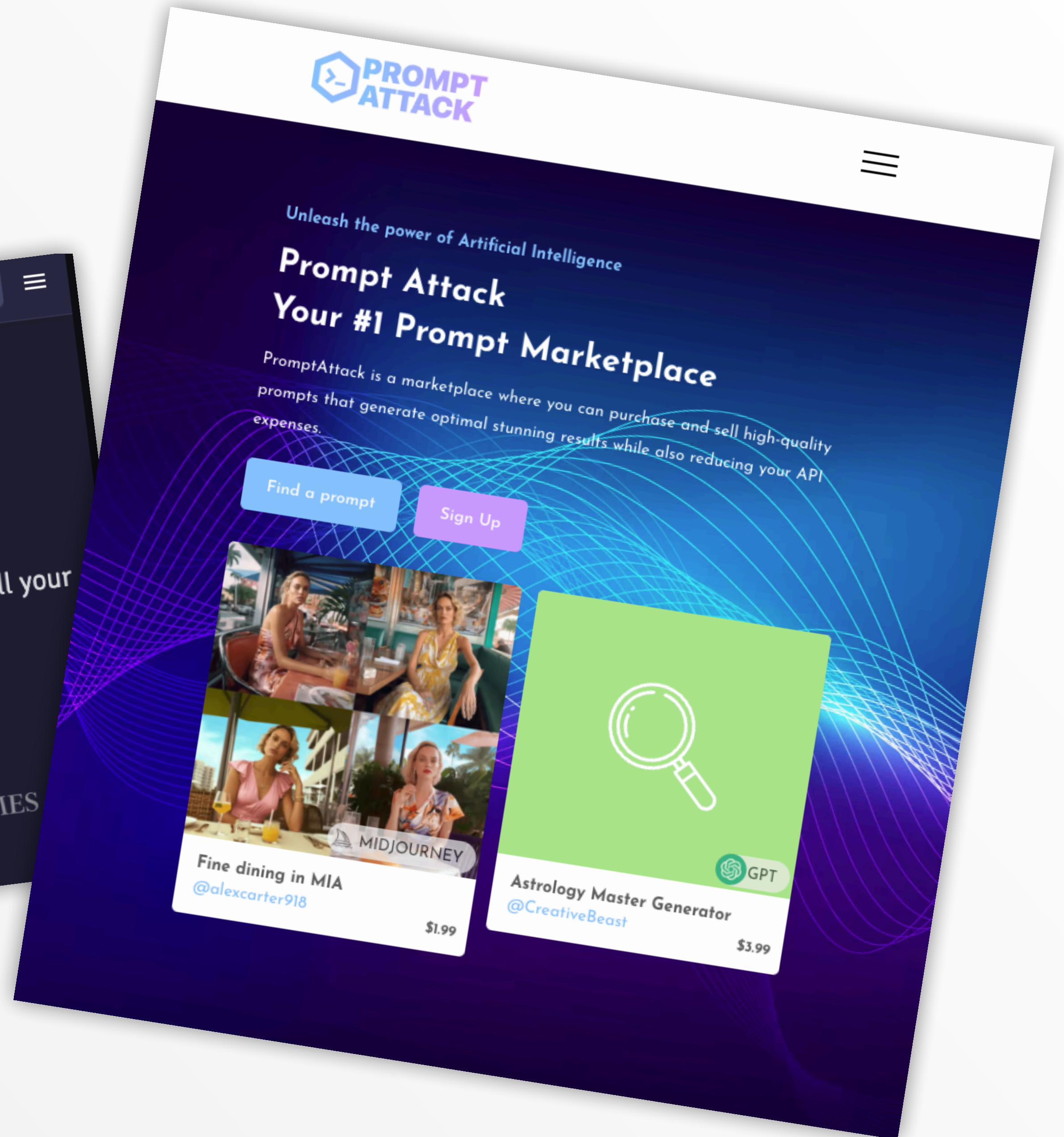


Growth of the AI tool learning curve

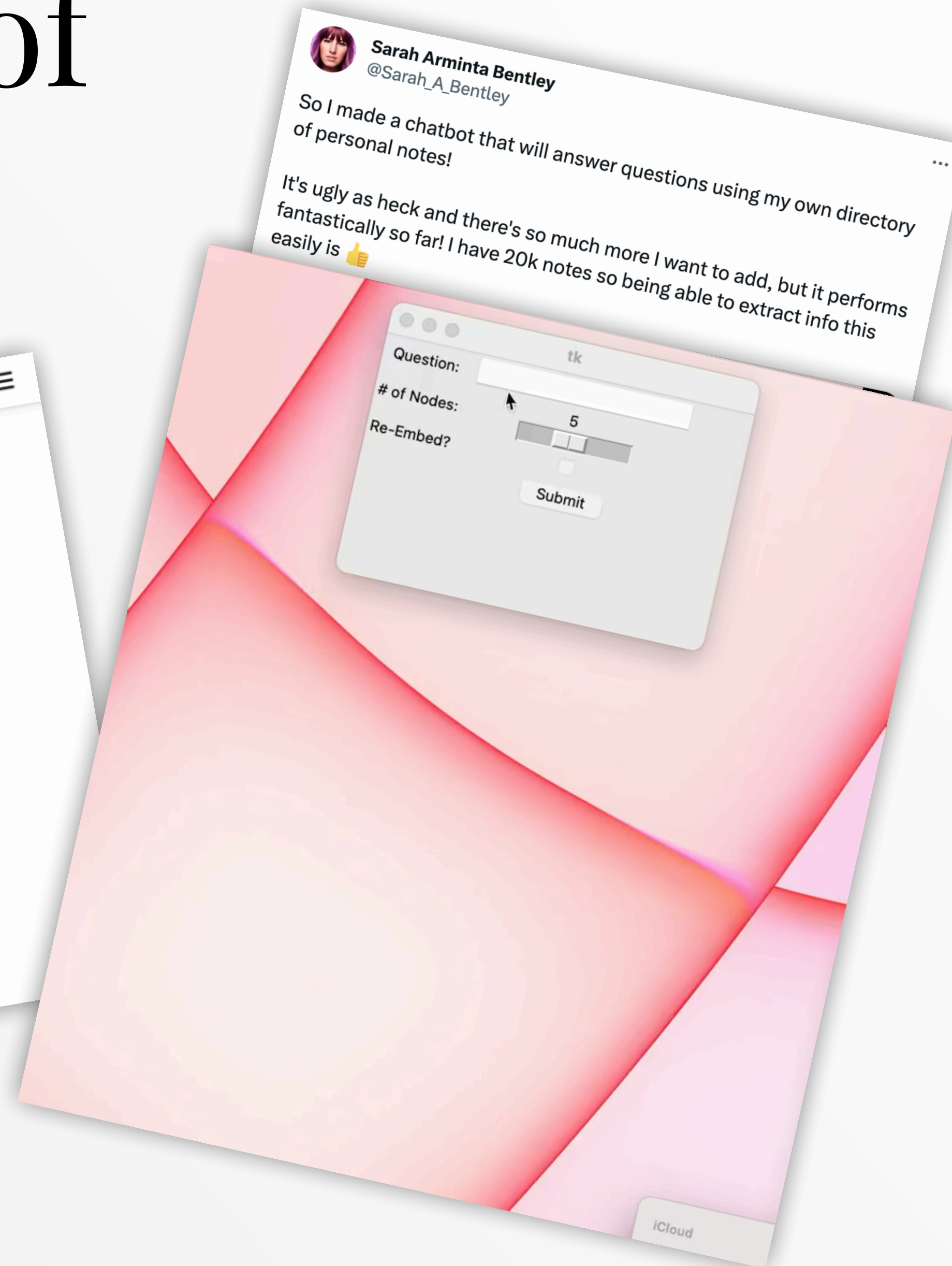
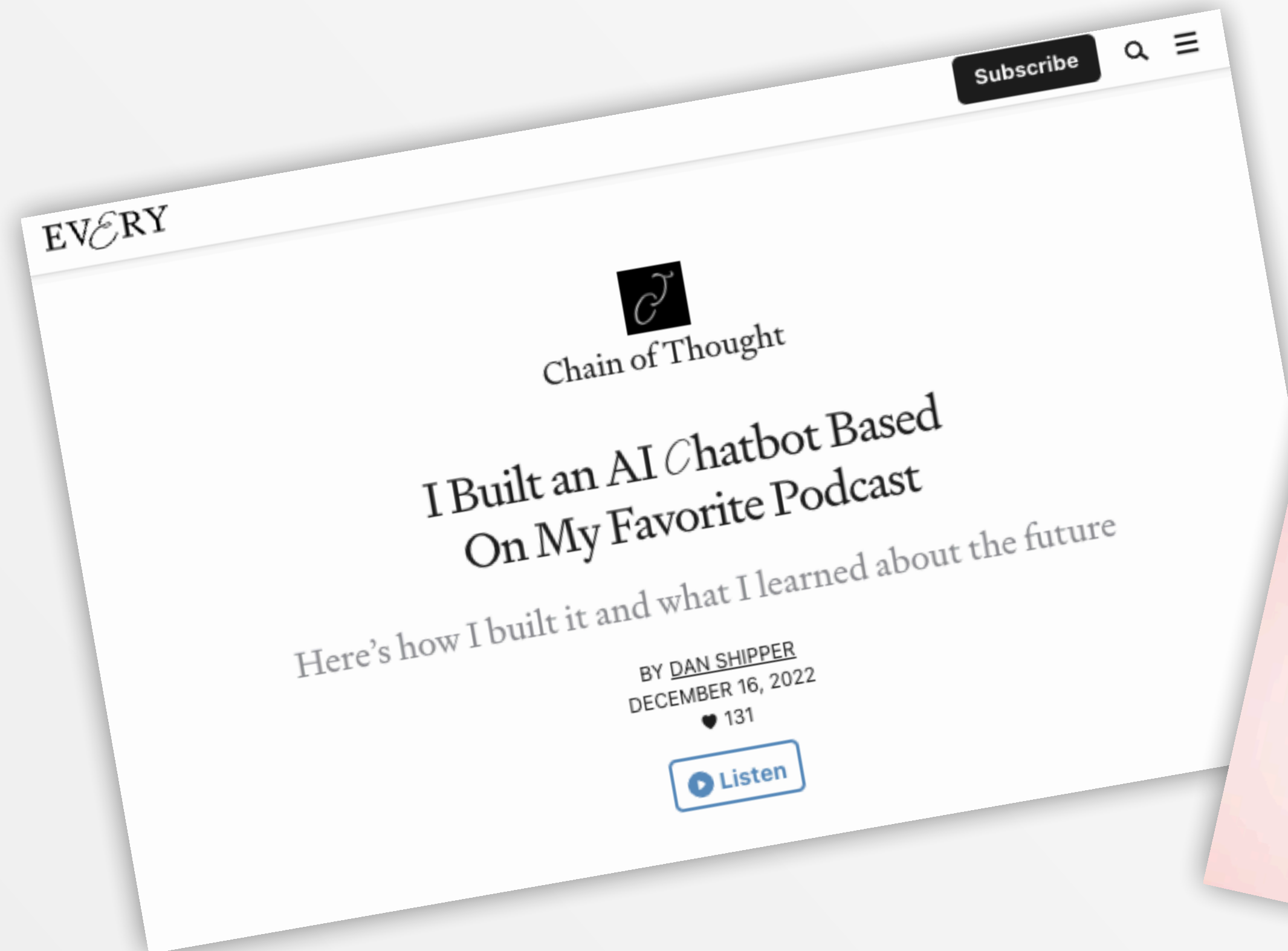
When writing good prompts, you have to account for the idiosyncrasies of the model(s) you're working with. The strategies will vary with the complexity of the tasks. **You'll have to come up with mechanisms to constrain the model to achieve reliable results, incorporate dynamic data that the model can't be trained on, account for limitations in the model's training data, design around context limits, and many other dimensions.**



Growth of the AI tool learning curve



Growing utility of scoped chatbots




Integration of generative AI tools into other apps and services


MICROSOFT / TECH / WINDOWS

Microsoft announces Windows Copilot, an AI 'personal assistant' for Windows 11 / Move over, Cortana. Copilot is the new assistant in Windows town.


By Tom Warren, a senior editor at WinRumors, a site dedicated to Microsoft news and rumors.
May 23, 2023, 12:30 PM GMT-2:30

Announcing Windows Copilot



Watch on  YouTube


Microsoft Copilot is available in Windows 11 Pro, Enterprise, and Education editions.



ChatGPT plugins

We've implemented initial support for plugins in ChatGPT. Plugins are tools designed specifically for language models with safety as a core principle, and help ChatGPT access up-to-date information, run computations, or use third-party services.

[Join plugins waitlist](#) [Read documentation](#)



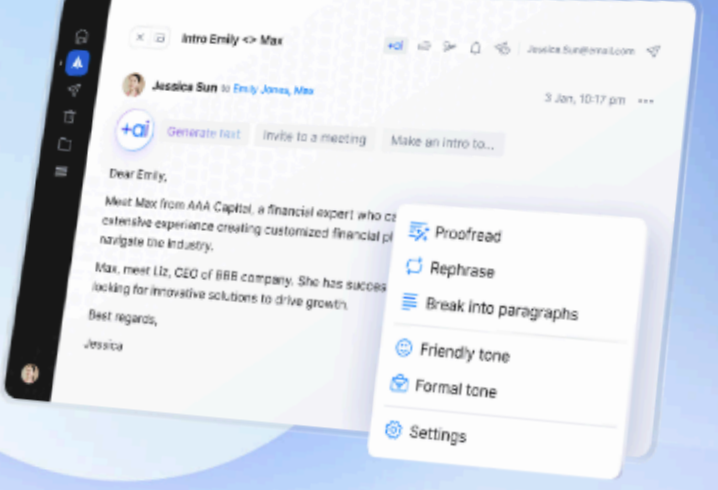
AI Assistant

[Add to Todoist](#) [Learn more](#)

Figure out how to accomplish your goals with the power of AI!*

Often, we know where we want to go; we just don't quite know how to get there. AI Assistant brings the power of AI to your fingertips to help you achieve your goals.

- AI Assistant can help make your goals more attainable by creating a list of tasks to reach your goal. See it in action by selecting **Suggest tasks with AI Assistant** from a project's menu and typing what you want to achieve in the text field (e.g., Learn Spanish).



Spark +ai

Meet the AI-powered email assistant that helps you craft the perfect email in seconds. Rephrase, correct grammar, adjust tone, and more.

[Free download](#) [Buy now](#)

★★★★★ 4.8 • 141.3K ratings

Editor's Choice
Used by Apple

Growing trust in chatbots

is there any such setting "Auto-apply child tags" if i tag parent tag, it is not automatically tagging it with child tags

There could be a few reasons why the child tags are not automatically created when you tag a parent tag in Obsidian. Here are a few things to check:

1. Verify that the child tags were created correctly: Make sure the child tags are created as children of the parent tag in the "Tags" pane.
2. Check if the option "Auto-apply child tags" is enabled: In the "Tags" pane, the option "Auto-apply child tags" is enabled. If it is disabled, you will need to manually apply the child tags each time you tag a parent tag.

The New York Times

A.I. and Chatbots > Explore Milan With A.I. Testing a Tutorbot Chatbot Prompts to Try A.I.'s Literary Skills What Are

The ChatGPT Lawyer Explains Himself

In a cringe-inducing court hearing, a lawyer who relied on A.I. to craft a motion full of made-up case law said he "did not comprehend" that the chat bot could lead him astray.

Give this article Share Bookmark 267



Steven A. Schwartz told a judge considering sanctions that the episode had been "deeply embarrassing." Jefferson Siegel for The New York Times

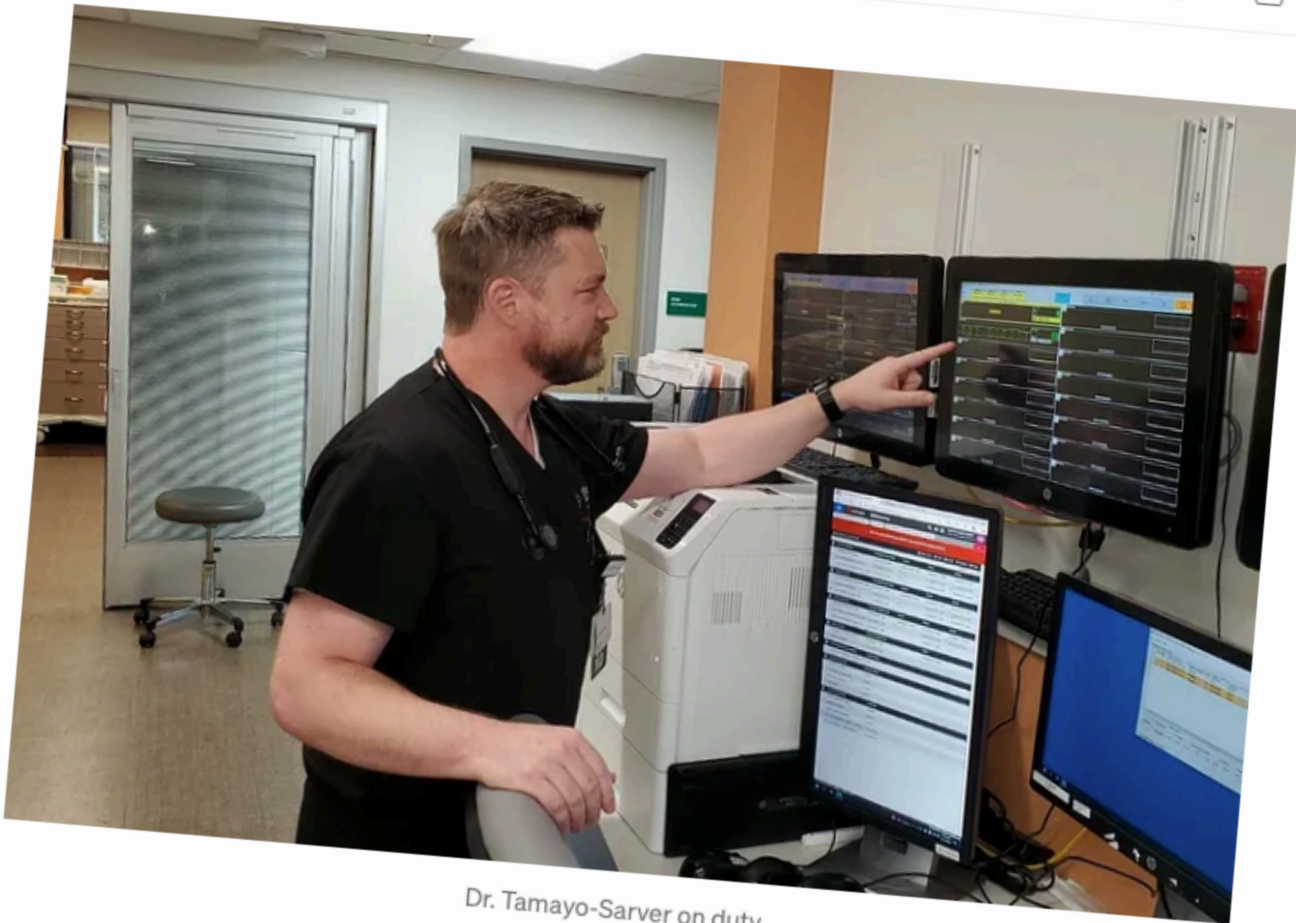
By Benjamin Weiser and Nate Schweber

June 8, 2023

I'm an ER doctor. Here's how I'm already using ChatGPT to help treat patients.

Infect Health · Follow
7 min read · 1 day ago

175



Dr. Tamayo-Sarver on duty

There are many futuristic possibilities for how AI might transform healthcare. But it can help doctors do a better job in small, safe ways — right now.

by **Josh Tamayo-Sarver, MD, PhD**

With explosive interest in ChatGPT and other large language model programs, many AI evangelists are touting their use as a diagnostic tool in healthcare — or even broadly declaring it to be the future of medicine. As with many high tech innovations, proclamations like this can often overshadow small but crucial applications that are immediately in our grasp.

Growing distrust in chatbots

The Verge / Tech / Reviews / Science / Entertainment

ARTIFICIAL INTELLIGENCE / TECH / POLICY

Top AI conference bans use of ChatGPT and AI language tools to write academic papers

AI tools can be used to 'edit' and 'polish' authors' work, say the conference organizers, but text 'produced entirely' by AI is not allowed. This raises the question: where do you draw the line between editing and writing?

By James Vincent, a senior reporter who has covered AI, robotics, and more for eight years at The Verge.
Jan 5, 2023, 1:34 PM GMT-3:30

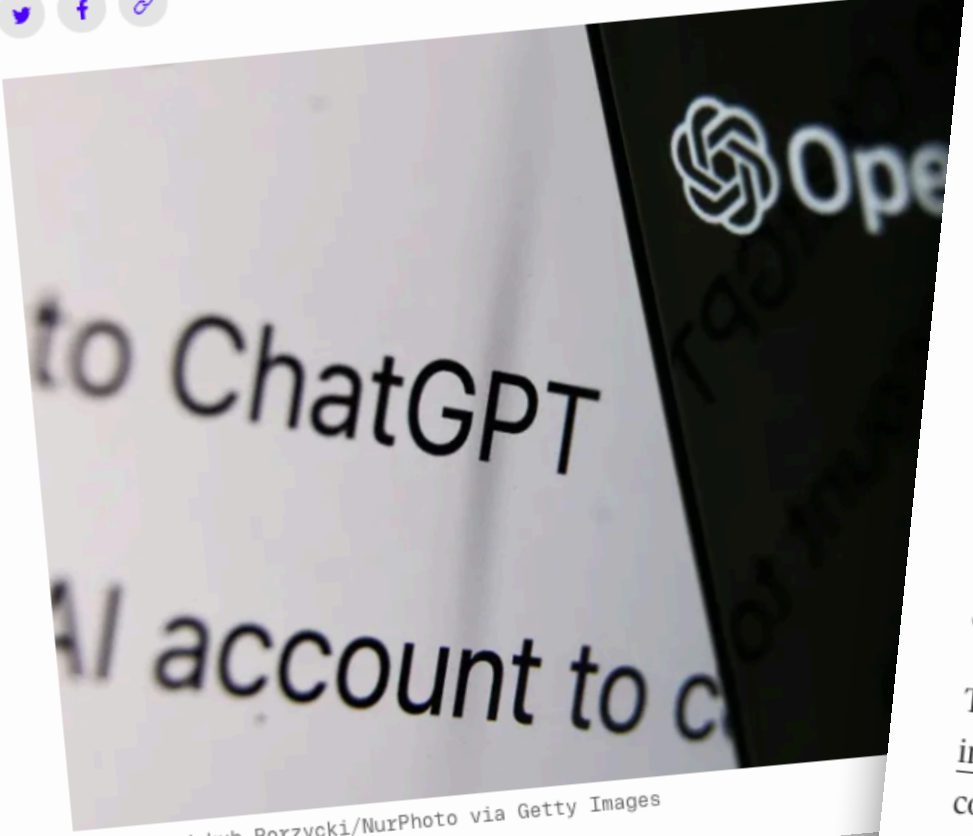


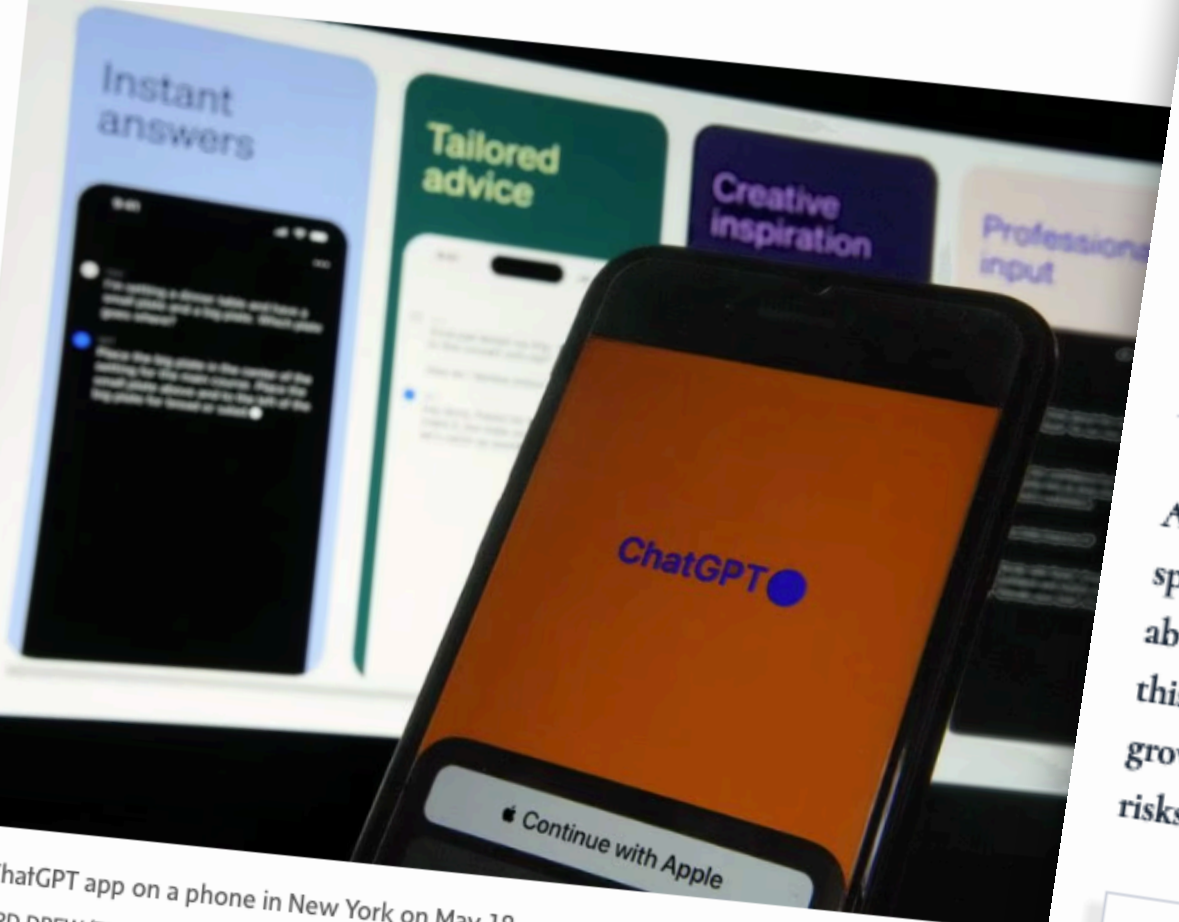
Photo by Jakub Porzycki/NurPhoto via Getty Images

THE GLOBE AND MAIL

YOUR GLOBE CANADA WORLD BUSINESS INVESTING WATCHLIST PERSONAL FINANCE OPINION POLITICS

ChatGPT creator OpenAI under scrutiny as provinces join federal privacy probe

IRENE GALEA
PUBLISHED MAY 25, 2023
UPDATED MAY 27, 2023



The ChatGPT app on a phone in New York on May 18.
RICHARD DREW/THE ASSOCIATED PRESS

8 COMMENTS SHARE BOOKMARK GIVE THIS ARTICLE LISTEN TO ARTICLE

Canada's federal privacy regulator is expanding its investigation into OpenAI, the creator of ChatGPT, joining many government bodies around the world in attempting to address concerns about the potentially harmful consequences of artificial intelligence.

The Office of the Privacy Commissioner of Canada announced in April that it was investigating California-based OpenAI in response to a complaint that ChatGPT had collected and disclosed personal information without consent. On Thursday, the commissioner said privacy commissioners in Quebec, British Columbia and Alberta are joining the effort, and that the investigation is being broadened beyond the initial complaint.

Center for AI Safety

Statement on AI Risk

AI experts and public figures express their concern about AI risk.

Contents

Statement Signatories Sign the statement

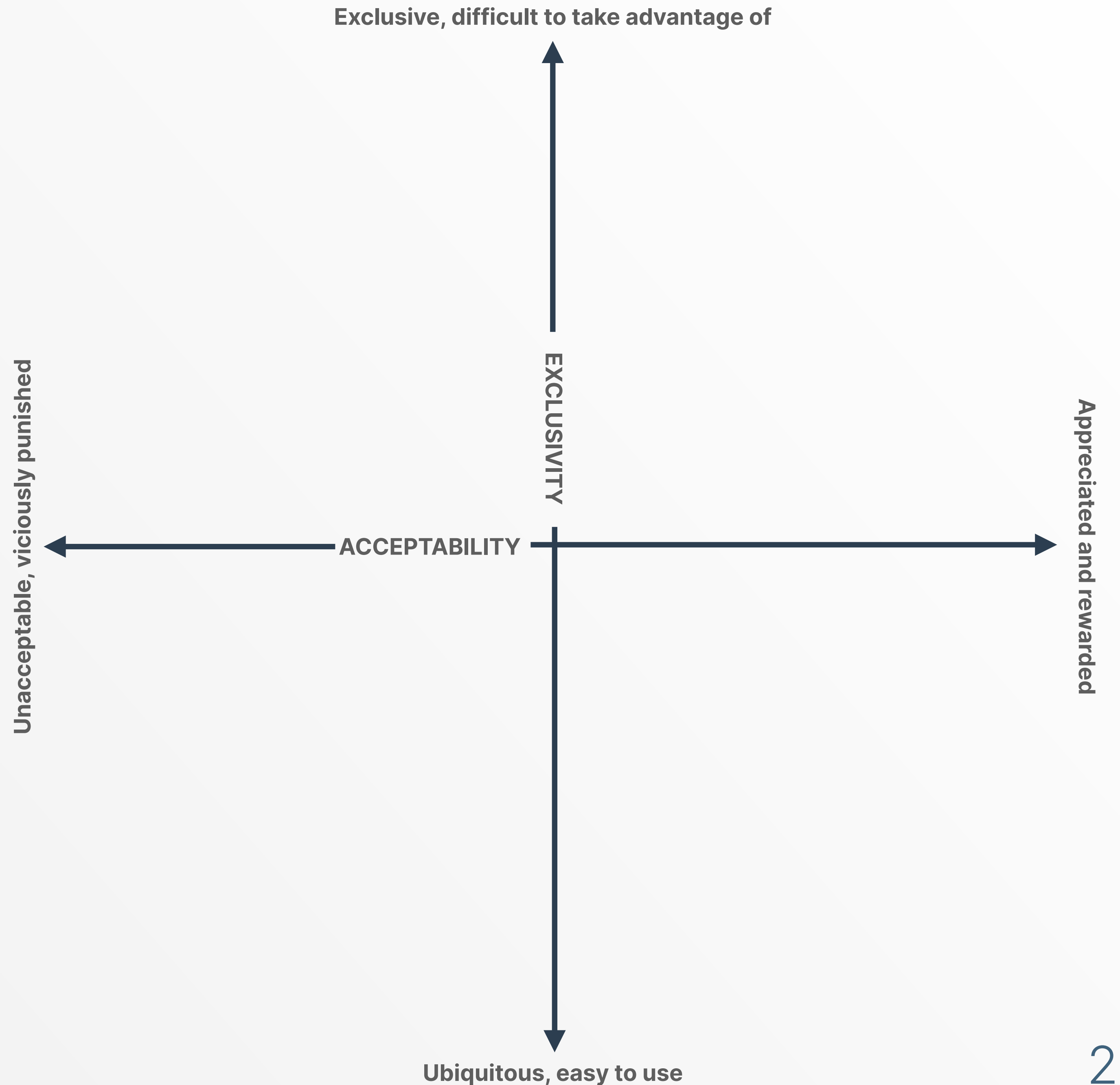
AI experts, journalists, policymakers, and the public are increasingly discussing a broad spectrum of important and urgent risks from AI. Even so, it can be difficult to voice concerns about some of advanced AI's most severe risks. The succinct statement below aims to overcome this obstacle and open up discussion. It is also meant to create common knowledge of the growing number of experts and public figures who also take some of advanced AI's most severe risks seriously.

Mitigating the risk of extinction from AI should be a global priority alongside other societal-scale risks such as pandemics and nuclear war.

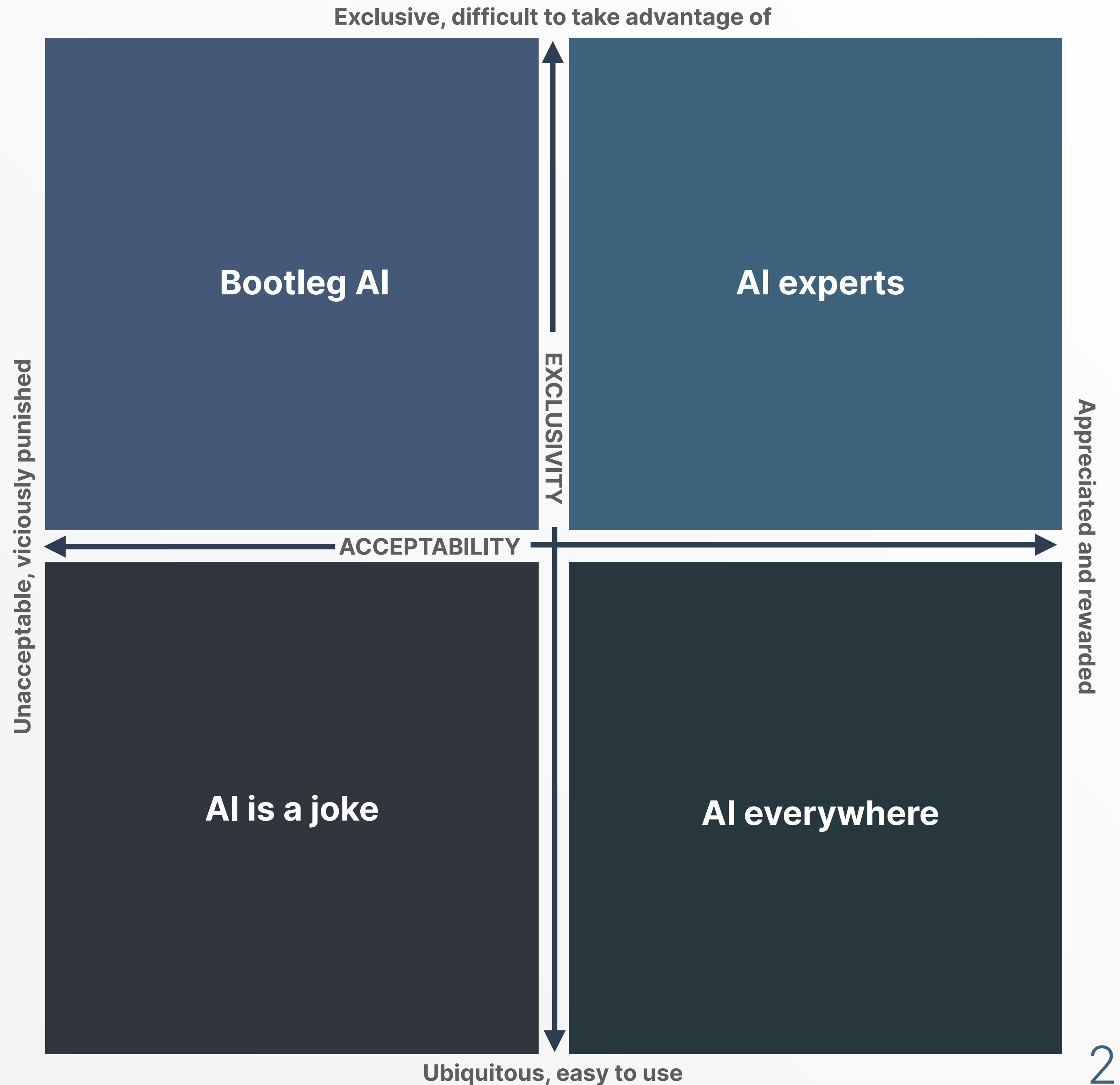
Signatories:

- AI Scientists
- Other Notable Figures

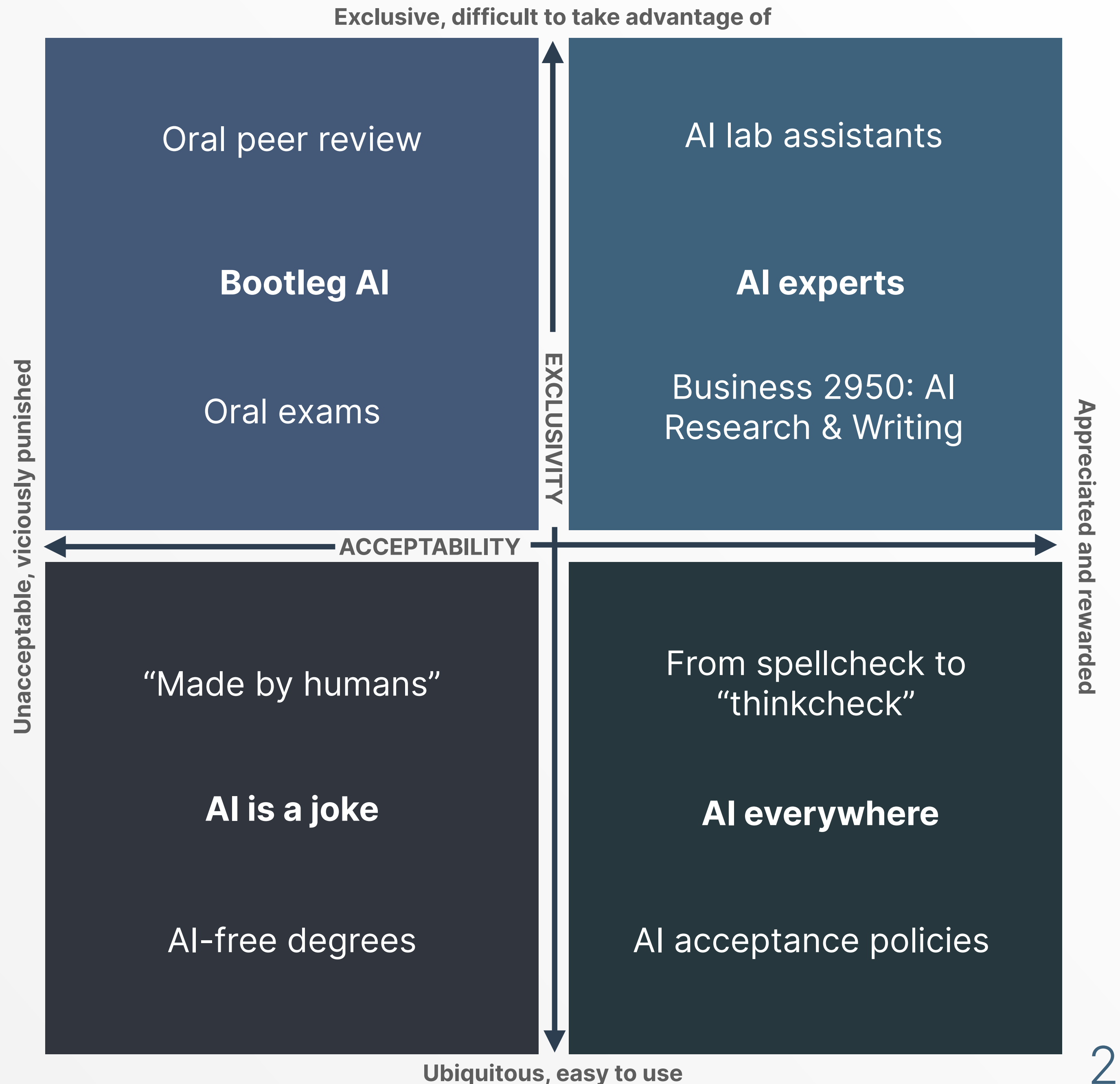
Critical
uncertainties,
possible
scenarios, and
artifacts from
the future



Critical
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Critical
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Some advice

Table 5. Some Guidance for the Use of Generative AI Tools (for Now)

Challenges Posed by Generative AI for Scholarly Work

1. **Institutionalizing bias:** Generative AI relies on training data and encoded rules that reflect human biases, resulting in further reification of social problems in broader society or flawed conclusions in the literature.
2. **Hallucinations:** Generative AI fabricates false or misleading responses to prompts from scholars.
3. **Interpretability:** Generative AI offers suggestions with scant explanation for why an output was created, creating issues related to credible inference and interpretation.
4. **Inappropriate Training Data:** Generative AI offers inappropriate guidance because it has not been trained on data information relevant to a research topic or method.
5. **Misapplication:** Generative AI is used to complete peer reviews, lead literature searches, or write key elements of papers without appropriate supervision.
6. **Unreasonable expectations:** Scholars may expect access to generative AI to result in unreasonably sophisticated understanding of literature or expert applications of state-of-the-art research methods

Suggestions for Mitigating Problems Posed by Generative AI

1. **Independent Knowledge:** When studying a topic or using a method, a scholar must develop a baseline of knowledge and experience necessary to prompt as well as assess the outputs of generative AI.
2. **Critical Thinking:** When reviewing the output of generative AI, scholars should consider the following: (a) the face validity: are the outputs consistent with the scholar's understanding of the literature? (b) falsifiability, is it possible—through logic or evidence—to critically examine and subject the outputs provided by generative AI to invalidation? This helps ensure that humans guide the application of AI.
3. **Awareness of Implications:** As scholars consider the output of generative AI, they need to actively question the biases and their implications for people and organizations. Scholars should demonstrate in their work an awareness of multiple perspectives and interpretations so that readers understand the potential biases from these tools have been taken into consideration.
4. **Understanding Provenance:** When using generative AI, scholars must understand the data that was used to train the tool.
5. **Ethical Conduct:** Scholars should use generative AI as per current professional norms. Writing and reviewing papers are critical activities that the researchers need to be undertake cautiously and responsibly when using generative AI.

Guiding Principles for Scholars Seeking to Apply Generative AI in Scholarly Work

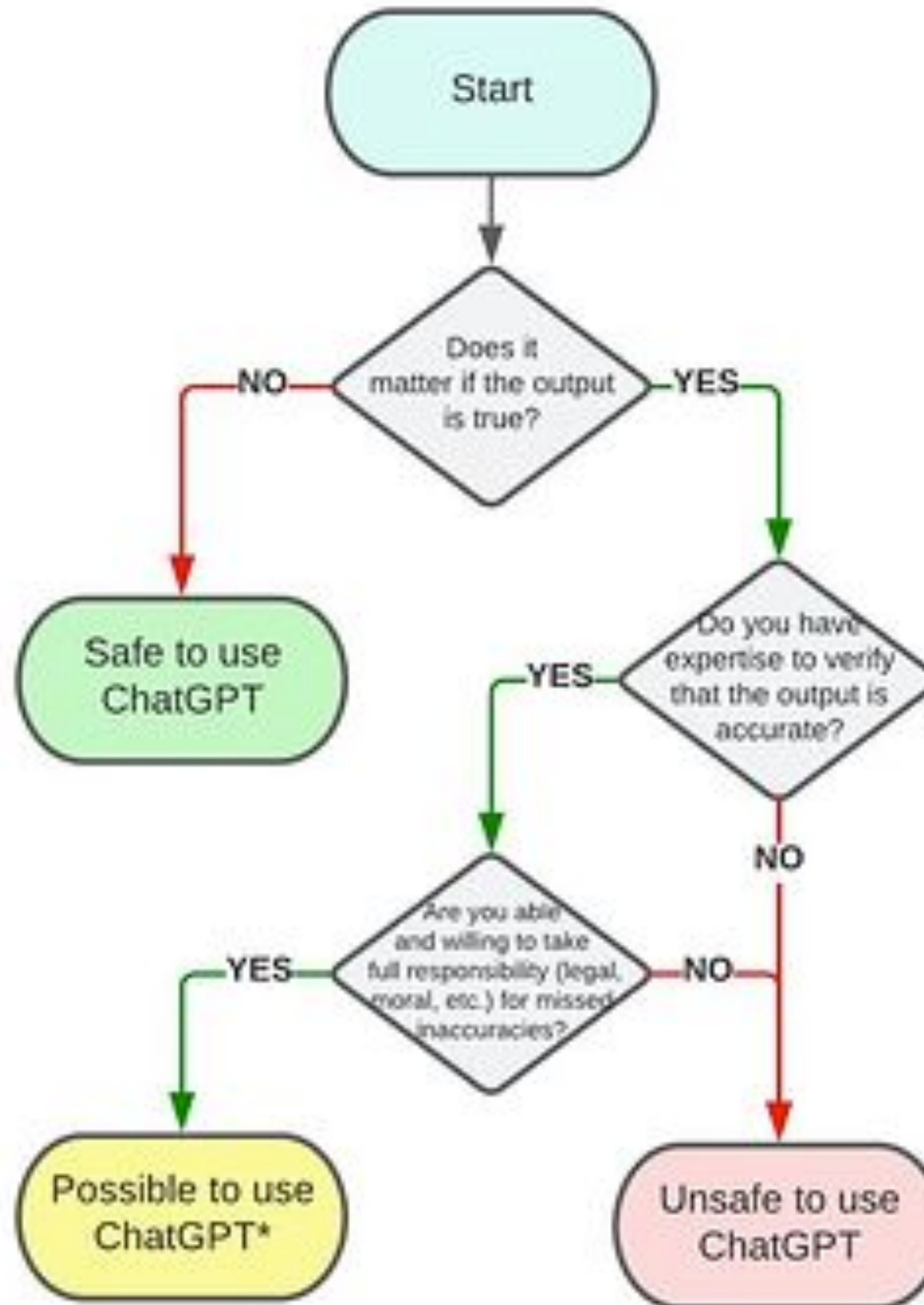
1. **Human Primacy:** Scholars retain decision rights over key elements of research.
 2. **Responsible Reporting:** Scholars faithfully report (1) which generative AI was used, (2) what data were used to train the AI (if known), and (3) how the tool was used to support scholarly inquiry.
-

Anjana Susarla, Ram Gopal, Jason Bennett Thatcher, Suprateek Sarker (2023) The Janus Effect of Generative AI: Charting the Path for Responsible Conduct of Scholarly Activities in Information Systems. *Information Systems Research* 0(0). <https://doi.org/10.1287/isre.2023.ed.v34.n2>

Some advice

Is it safe to use ChatGPT for your task?

Aleksandr Tiulkanov | January 19, 2023



* but be sure to verify each output word and sentence for accuracy and common sense



Some advice

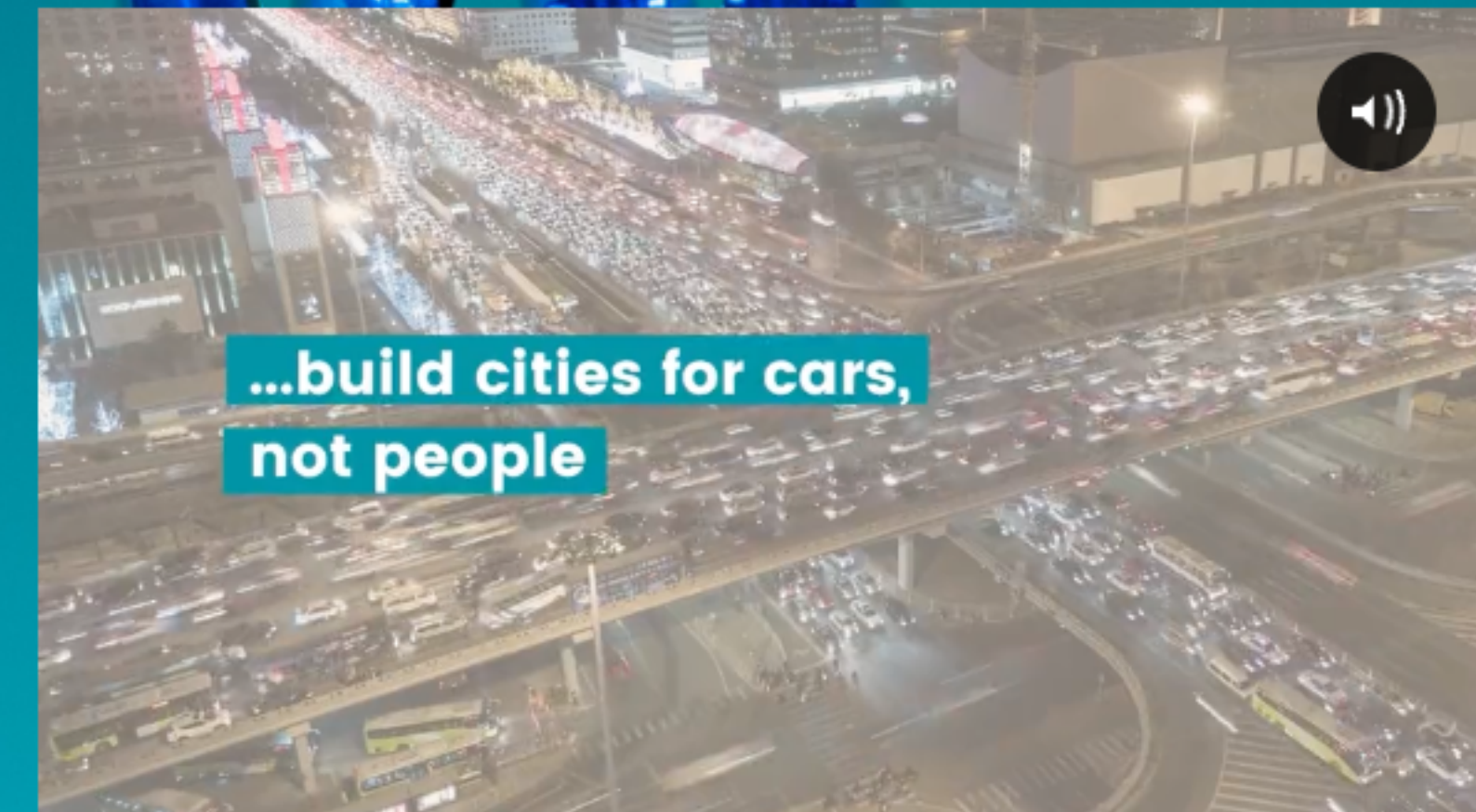
Tech Stewardship

Bend the arc of technology towards good

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Next steps

- **Continue developing this scan/
these scenarios**
- **A design theory for using text
generators in research**