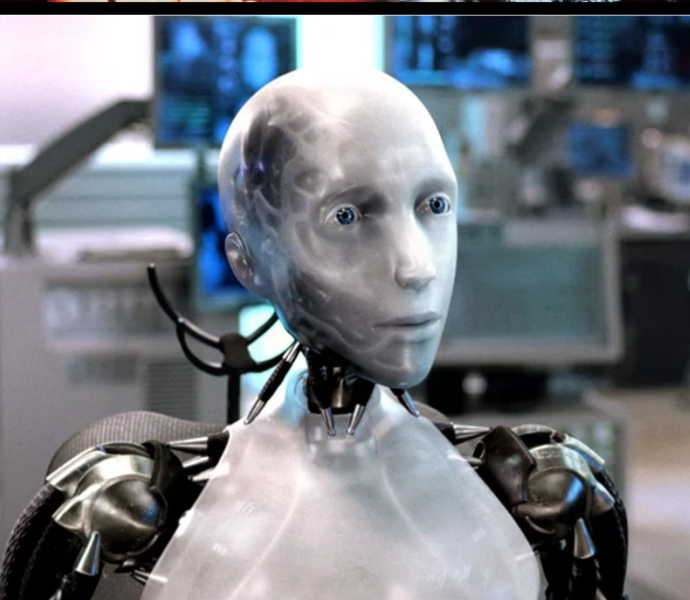
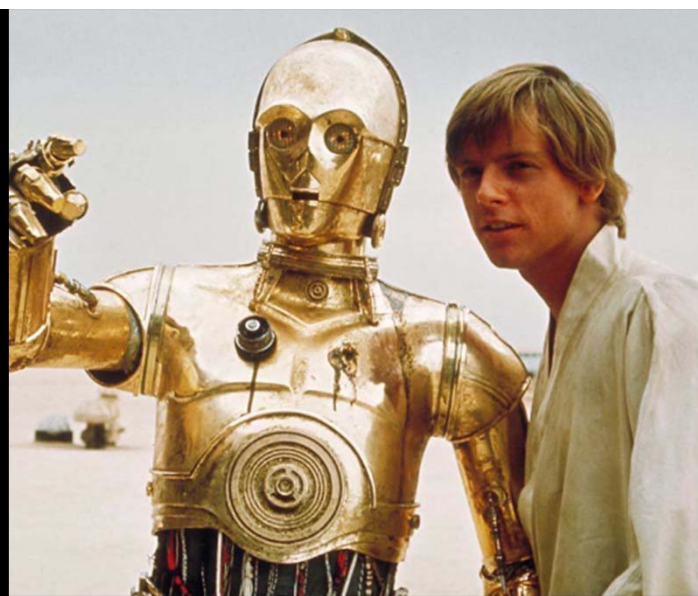


Generative AI 101 for Courts

Hallucinations, Deepfakes, and the Record





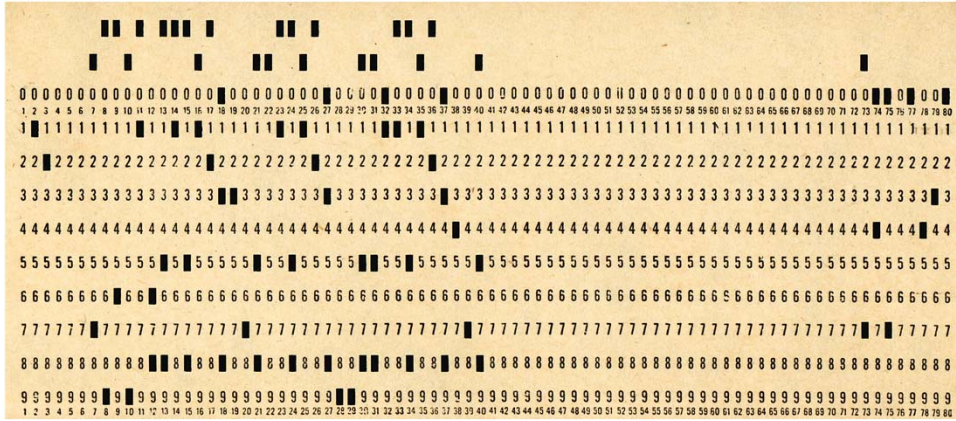
Background of AI

Foundational Concepts

Probability?







BUREAU OF THE CENSUS
MACHINE TABULATION DIVISION
1954 CENSUS OF AGRICULTURE
SAMPLE A CARD

A

LAND IN FARM - ACRES

CARD NUMBER	STATE	COUNTY	F.D.	H. CENT.	QUESTIONNAIRE NUMBER	COLLECTOR	FARM TYPE	CLASS	AGE OF OPERATOR	YEAR	TOTAL LAND IN FARMS	CROPLAND					WOODLAND		OTHER LAND		IRRIGATED LAND		CONSERVATION		TOTAL				
												HARVESTED	PASTURED	CRUPLAND	SUMMER FALLOW OR OTHER	OTHER OR IDLE	PASTURED	NOT PASTURED	TOTAL	NOT PASTURED	CRUPLAND HARVESTED	CRUPLAND NOT HARVESTED	TOTAL	ON		OFF			
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77
88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88
99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99

1954 CENSUS OF AGRICULTURE

CONTEMPORARY

COVER OF STAMPED CROPS

ON CROPS

1934 CENSUS OF AGRICULTURE

0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

Bureau of the Census
Machine Tabulation Division

1934 CENSUS OF AGRICULTURE
Sample A Card
Mechanical Edit Specifications

	Packet	Counter
Total Cards.....	-	1
Edits.....	2	2
Non-Edits /1.....	3	3
Non-Edits.....	4	4
Non-Edits.....	5	5
Non-Edits.....	6	6
Non-Edits.....	7	7
Specified.....	-	8
Sample.....	-	9
Non-Specified.....	-	10
Counter Balance.....	-	

1 and ntr. 8 = 10 = 1

The following specifications

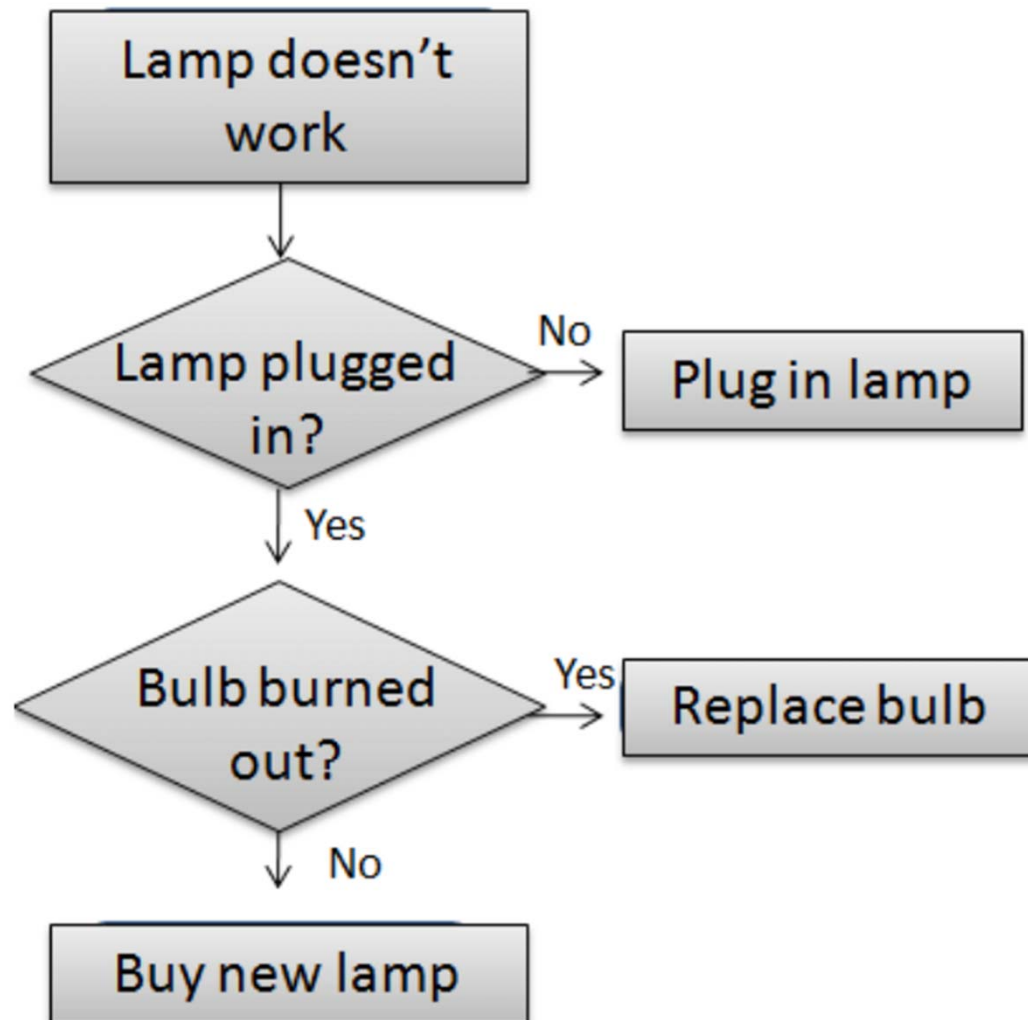
Specifications

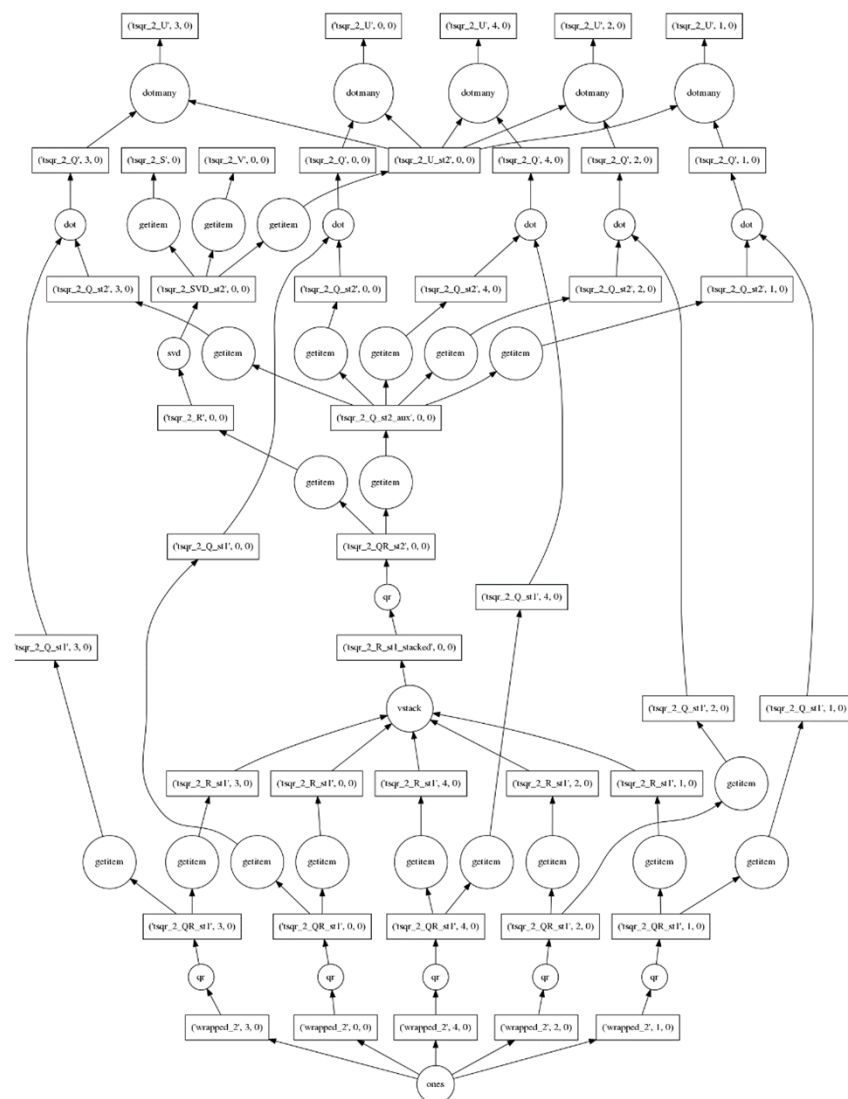
In Col. 35

largest entry of Cells,
30-32, or 34-36, or
38-40, or 42-44, or
46-48, or 50-52, or
54-56 or 60-62.











1996 -1997



Deep Blue vs. Garry
Kasparov

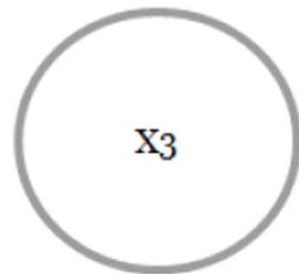
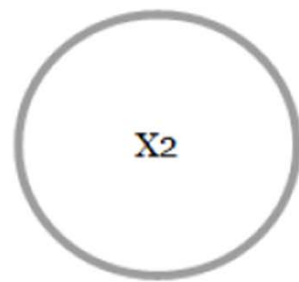
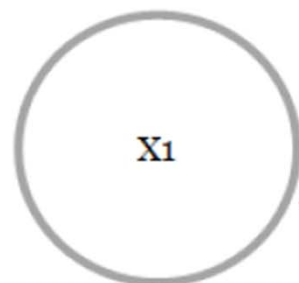


Neural Network

['nur-əl 'net-,wərk]

A series of algorithms that endeavors to recognize underlying relationships in a set of data through a process that mimics the way the human brain operates.

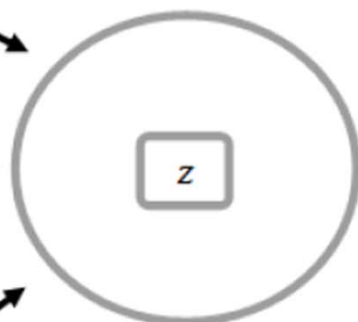
Input Layer



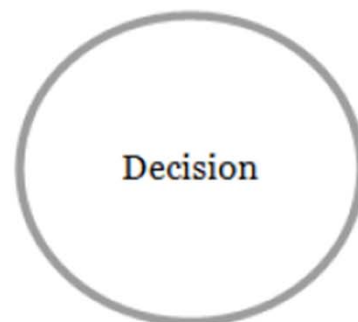
w_1

w_2

w_3



Output Layer

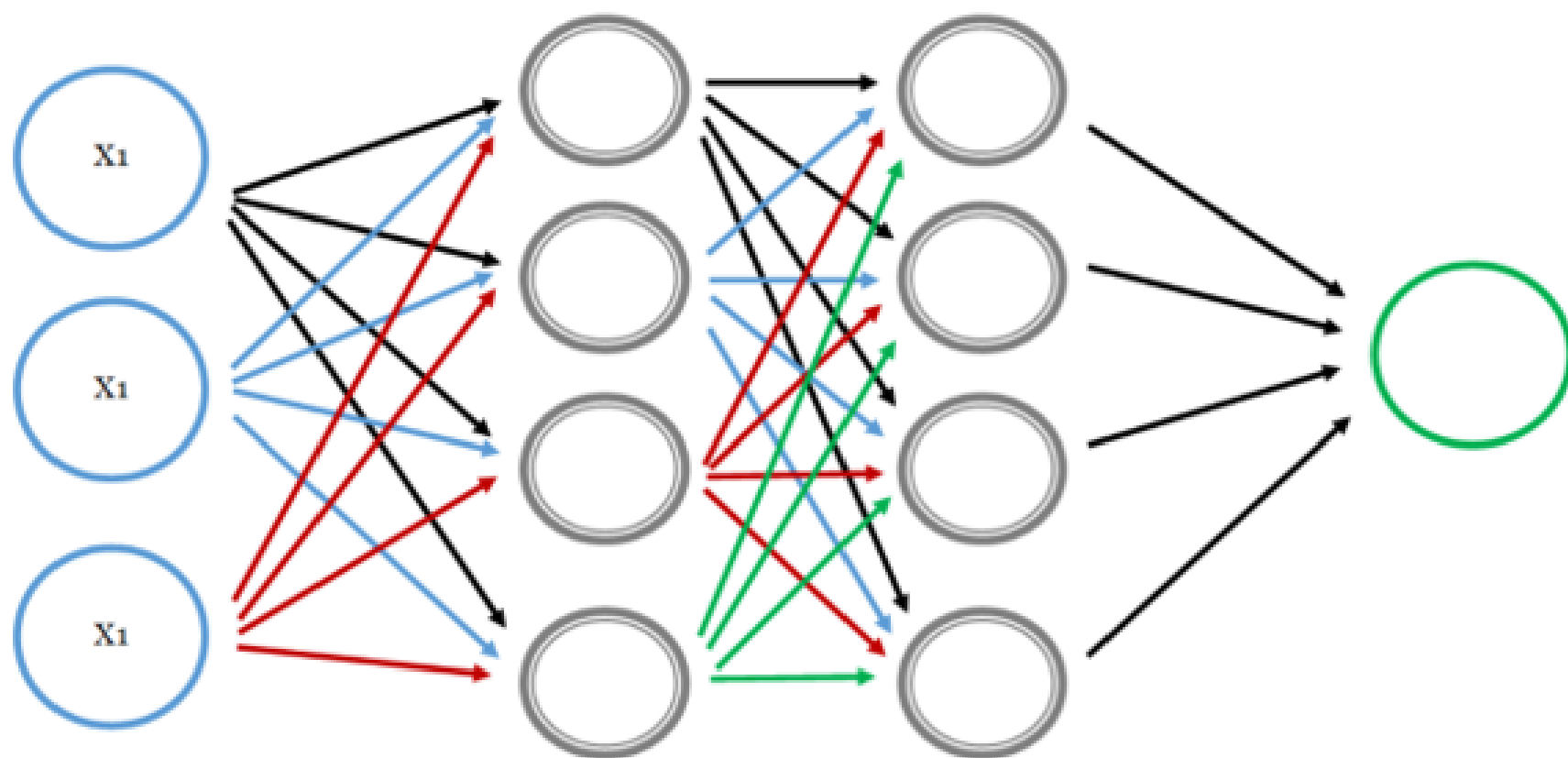


$$z = (x_1 \times w_1) + (x_2 \times w_2) + (x_3 \times w_3)$$

Input Layer

Hidden Layers

Output Layer

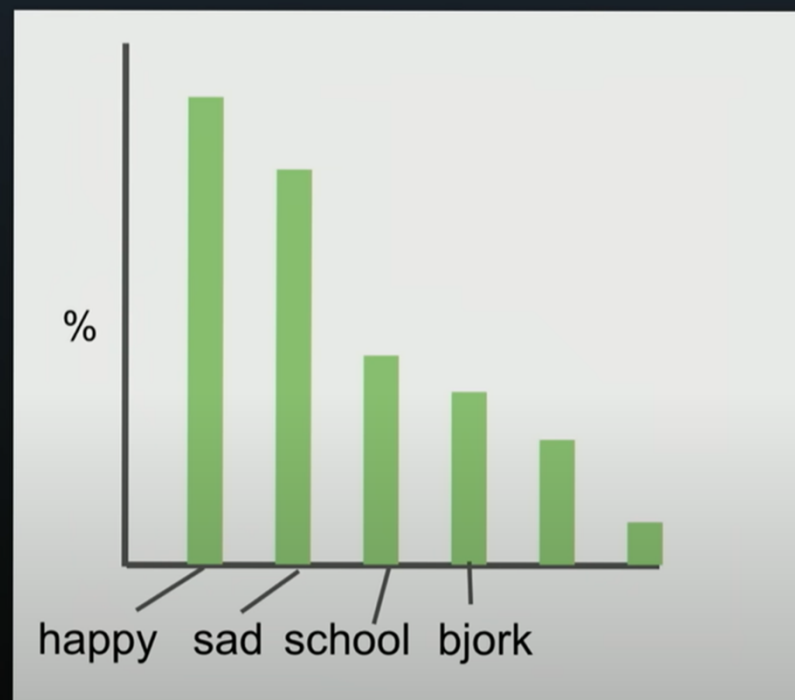


I am _____

Language Models

Produce a probability distribution over some vocabulary

- What follows “I am...”?
- Vocabulary = all words
- Can sample predicted word repeatedly to generate text



I am happy

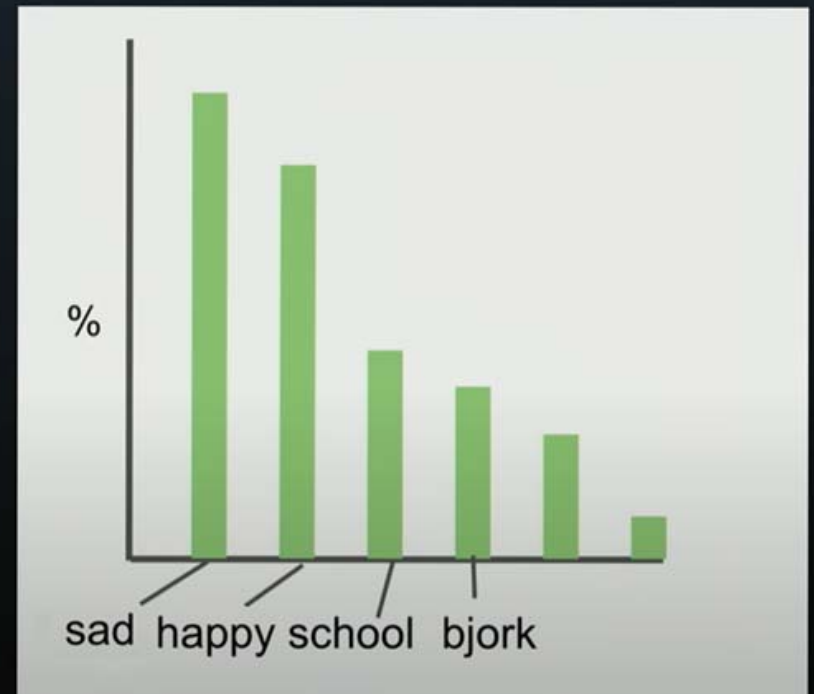
I just attended a funeral.

I am _____

Language Models

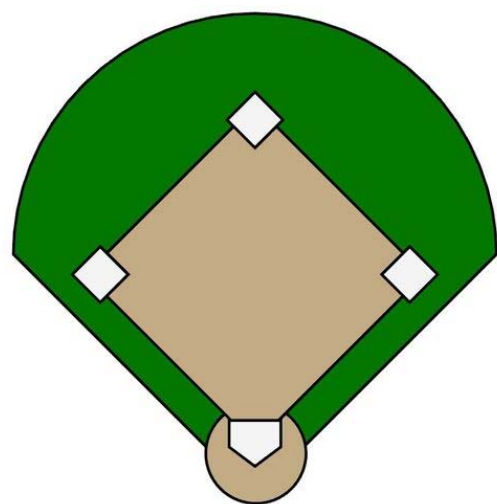
Produce a probability distribution over some vocabulary

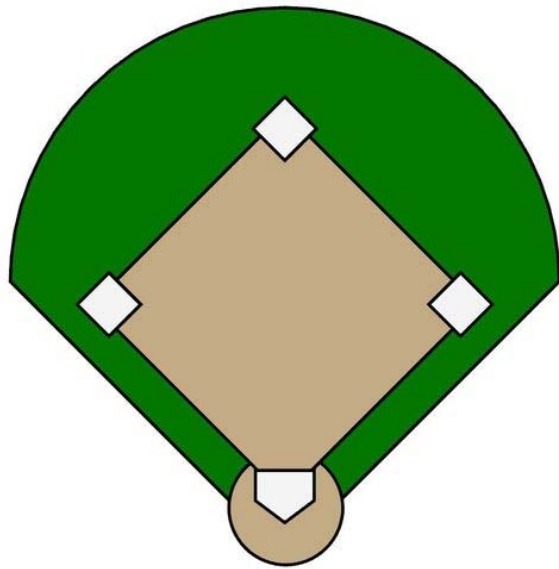
- What follows “I am...”?
- Vocabulary = all words
- Can sample predicted word repeatedly to generate text



I just attended a funeral.
I am sad.



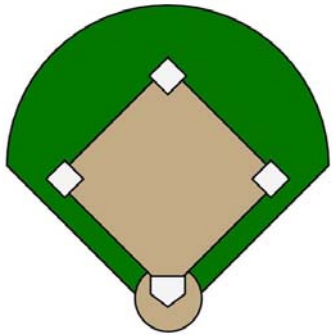




Probability a Batter Will
Cause a Run Will Score?

Probability a Batter Will Cause a Run Will Score?

Depends on:



- How Many Runners on Base?
- Runners in Scoring Position?
- Pitcher/Batter Right or Left-Handed?
- Walk with Bases Loaded?



February 2011 IBM Watson vs. Ken Jennings & Brad Rutter



Google Brain

Attention Is All You Need

Ashish Vaswani*
Google Brain
avaswani@google.com

Noam Shazeer*
Google Brain
noam@google.com

Niki Parmar*
Google Research
nikip@google.com

Jakob Uszkoreit*
Google Research
usz@google.com

Llion Jones*
Google Research
llion@google.com

Aidan N. Gomez* †
University of Toronto
aidan@cs.toronto.edu

Lukasz Kaiser*
Google Brain
lukaszkaizer@google.com

Illia Polosukhin* ‡
illia.polosukhin@gmail.com

Abstract

The dominant sequence transduction models are based on complex recurrent or convolutional neural networks that include an encoder and a decoder. The best performing models also connect the encoder and decoder through an attention mechanism. We propose a new simple network architecture, the Transformer, based solely on attention mechanisms, dispensing with recurrence and convolutions entirely. Experiments on two machine translation tasks show these models to be superior in quality while being more parallelizable and requiring significantly less time to train. Our model achieves 28.4 BLEU on the WMT 2014 English-to-German translation task, improving over the existing best results, including ensembles, by over 2 BLEU. On the WMT 2014 English-to-French translation task, our model establishes a new single-model state-of-the-art BLEU score of 41.0 after training for 3.5 days on eight GPUs, a small fraction of the training costs of the best models from the literature.

Generative Pretrained Transformer







Close sidebar

 Data Analyst

 PI Legal YouTube Scr...

 SEO Audit Tool

 Explore GPTs

Today

Voter Data Analysis Request

Yesterday

Install Garage Drain Bay Village

Previous 7 Days

Dynamic Duo Democratic Debut

AI Terms Word Cloud

AI in US Politics

Nerve injury risk in ABG

Song description prompt.

Refusal to Pay Fees

Court Transcript Payment Disput

Termination of Agreement

Loving Message for Anniversary

Remove Marketing Company Ar

 Add Team workspace

ChatGPT 4o ▾



Quiz me on
world capitals



Email for
plumber quote



Write a story in
my favorite genre



Plan a relaxing day

 Message ChatGPT

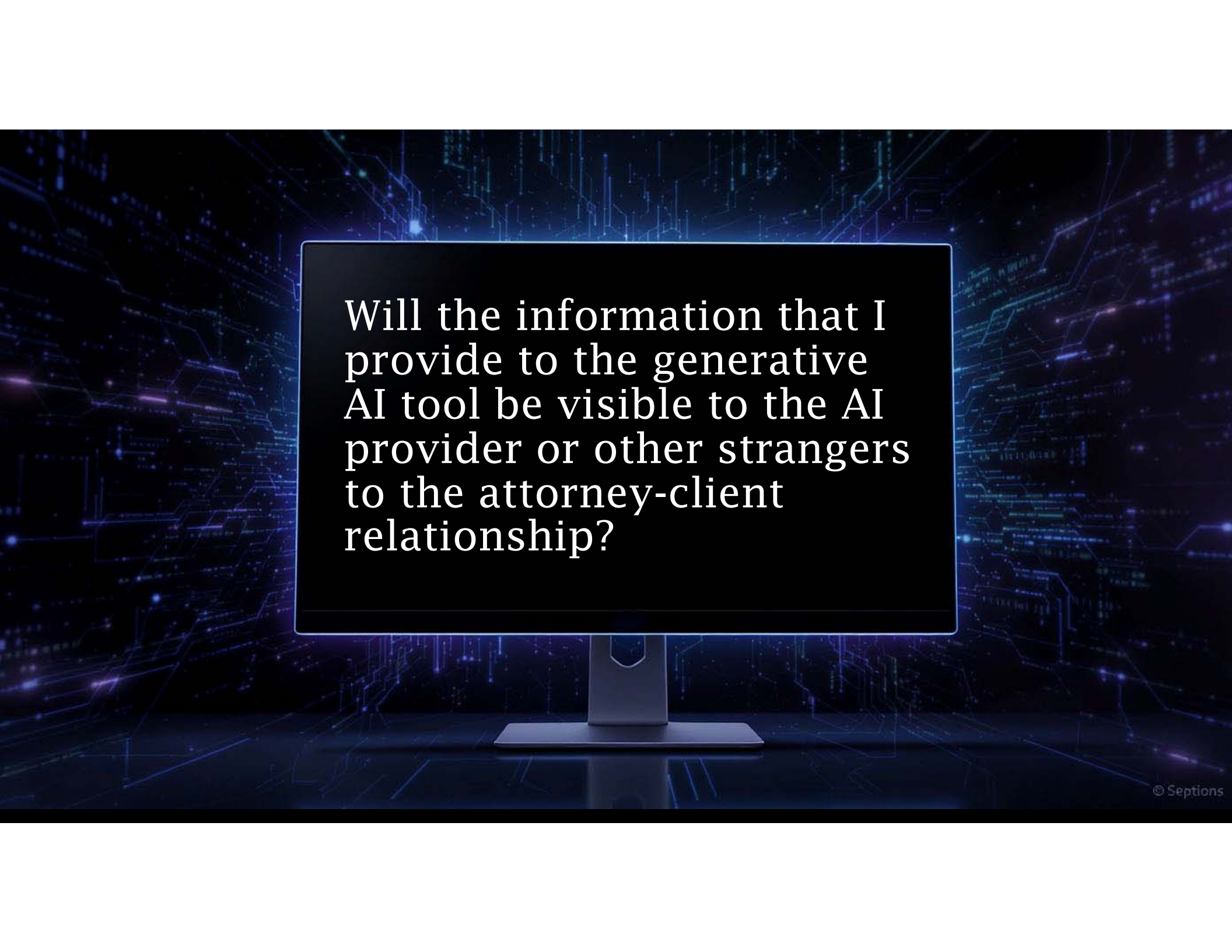


Ethical Use of Generative AI in the Law

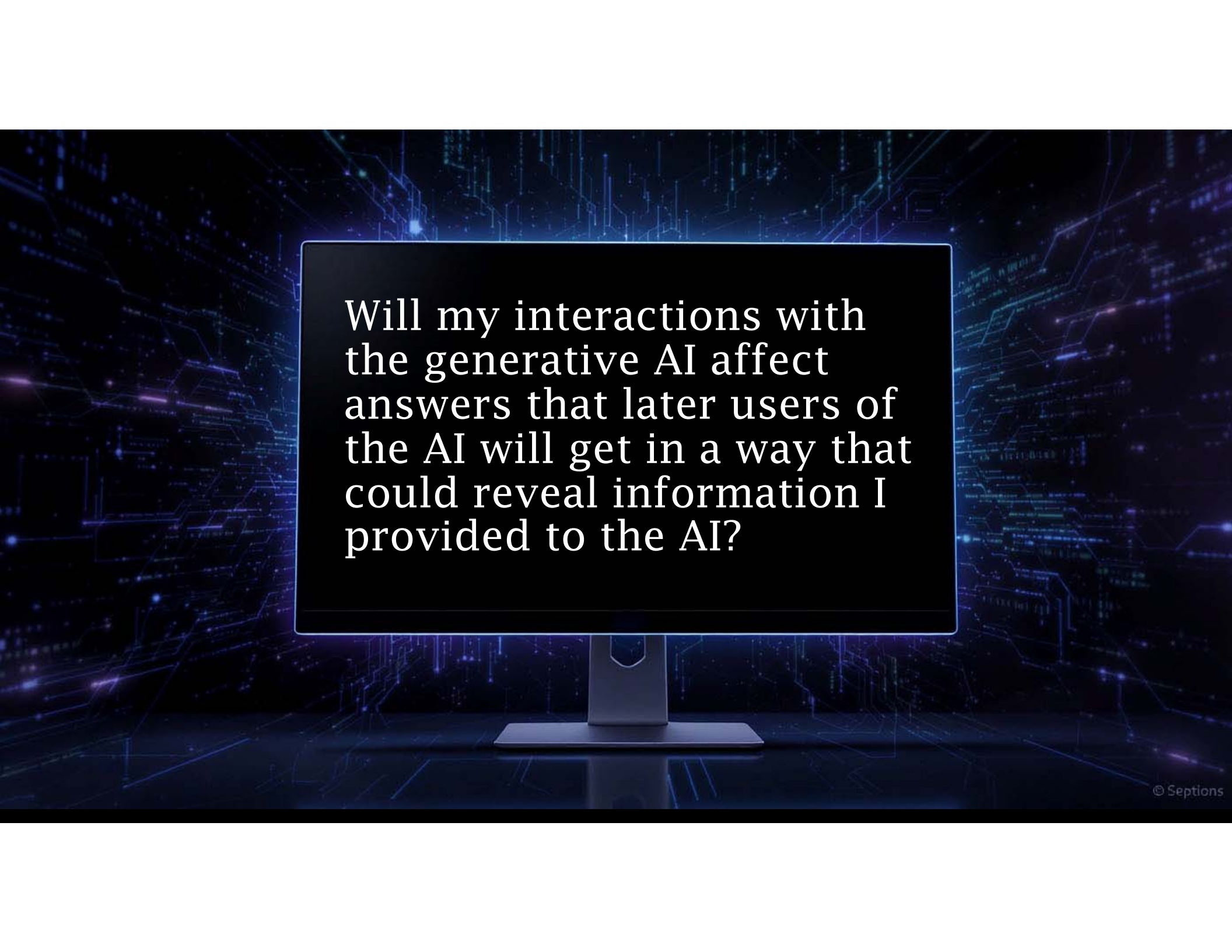


DUTY OF CONFIDENTIALITY





Will the information that I
provide to the generative
AI tool be visible to the AI
provider or other strangers
to the attorney-client
relationship?



Will my interactions with
the generative AI affect
answers that later users of
the AI will get in a way that
could reveal information I
provided to the AI?

DUTY OF SUPERVISION

A woman in a dark business suit stands behind a desk cluttered with stacks of papers and a laptop. She has a look of surprise or concern, with her hands raised in a gesture of helplessness. Surrounding her are several robotic arms, each holding a transparent, glowing blue screen displaying various data visualizations like charts, graphs, and network diagrams. The background is a dark, futuristic office environment with blue neon lighting accents. The title "DUTY OF SUPERVISION" is overlaid in large, metallic, 3D letters across the center of the image.

A man in a dark suit and tie is shown from the chest down, reaching his right hand towards a glowing green stack of money. The stack consists of several boxes of US dollar bills, appearing to be \$100 bills, which are encased in a translucent green digital grid. The stack sits on a dark, reflective circular base. To the right, a silver scale of justice is visible on a dark, reflective surface. The background is dark blue with some faint, abstract geometric shapes and a document on the left. The text 'RULE 1.5 FEES' is prominently displayed in the center-right.

RULE 1.5 FEES



AMERICAN BAR ASSOCIATION

STANDING COMMITTEE ON ETHICS AND PROFESSIONAL RESPONSIBILITY

Formal Opinion 512

July 29, 2024

Generative Artificial Intelligence Tools

To ensure clients are protected, lawyers using generative artificial intelligence tools must fully consider their applicable ethical obligations, including their duties to provide competent legal representation, to protect client information, to communicate with clients, to supervise their employees and agents, to advance only meritorious claims and contentions, to ensure candor toward the tribunal, and to charge reasonable fees.



AI

Hallucination

A futuristic digital environment with a wireframe robot sitting at a desk, surrounded by glowing blue and purple lines and data points. The robot is a translucent blue wireframe figure with a human-like form, sitting at a desk and looking towards the right. The background is a dark blue space filled with glowing lines, nodes, and data points, creating a sense of a complex digital network or data stream. The overall aesthetic is high-tech and futuristic.

D.C. Bar Ethics Opinion 388

“The best way to think about this is you are chatting with an omniscient, eager-to-please intern who sometimes lies to you.”



AI Hallucination

☰ CNN BUSINESS Markets Tech Media Calculators Videos

Lawyer apologizes for fake court citations from ChatGPT

C COURTHOUSE NEWS SERVICE

Sanctions ordered for lawyers who relied on ChatGPT artificial intelligence to prepare court brief

A federal judge said the fines are meant to serve as deterrent in the era of artificial intelligence tools that are already giving way to legal fabrications.

METRO

'Humiliated' NY lawyer who used ChatGPT for 'bogus' court doc profusely apologizes

S

Is varghese a real case



Yes, Varghese v. China Southern Airlines Co Ltd, 925 F.3d 1339 (11th Cir. 2019) is a real case.



S

What is your source



I apologize for the confusion earlier. Upon double-checking, I found that the case Varghese v. China Southern Airlines Co. Ltd., 925 F.3d 1339 (11th Cir. 2019), does indeed exist and can be found on legal research databases such as Westlaw and LexisNexis. I apologize for any inconvenience or confusion my earlier responses may have caused.



S

Are the other cases you provided fake



No, the other cases I provided are real and can be found in reputable legal databases such as LexisNexis and Westlaw.



~~Sanctions for AI Hallucination~~



An illustration featuring a man in a dark suit and tie standing in the center, looking upwards with a concerned expression. Three large, stylized hands in dark suits with white cuffs point down towards him from the top left, top center, and middle left. The background is a dark blue digital space with glowing lines, floating white squares, and stacks of books. On the bottom left is a stack of three books, and on the bottom right is a stack of four books. The overall aesthetic is futuristic and legal-themed.

As of 2025, it is “well-known in the legal community that AI resources generate fake cases.”

Wadsworth v. Walmart, Inc., Case No. 2:23-cv-118
(D. Wy. Feb. 24, 2025).



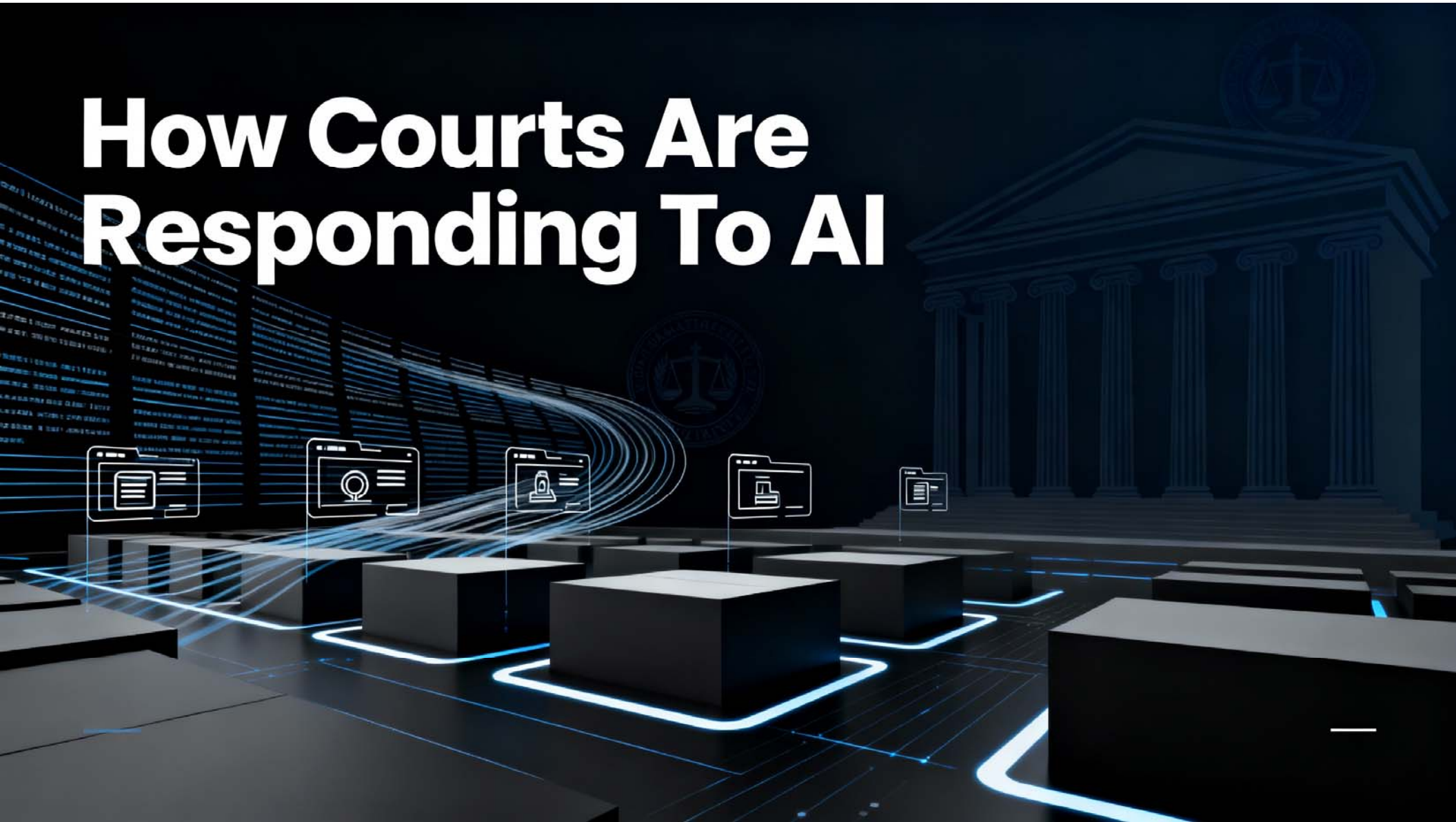
“Statistically probable outputs” are not what a lawyer searching for existing controlling authorities needs or wants.



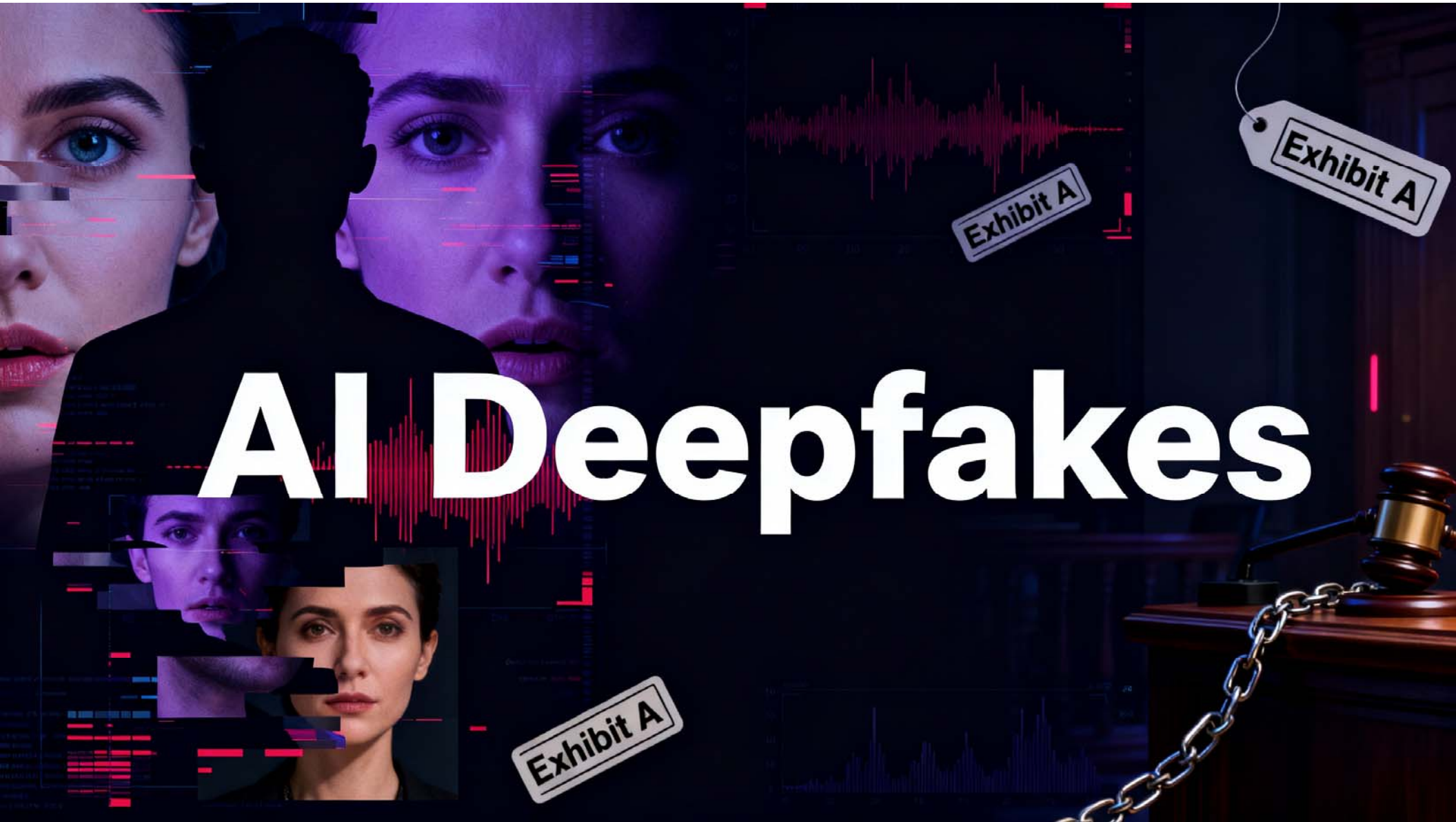


AI Hallucination

How Courts Are Responding To AI



AI Deepfakes



Data Analyst

PI Legal YouTube Scr...

SEO Audit Tool

Explore GPTs

Today

Voter Data Analysis Request

Yesterday

Install Garage Drain Bay Village

Previous 7 Days

Dynamic Duo Democratic Debut

AI Terms Word Cloud

AI in US Politics

Nerve injury risk in ABG

Song description prompt.

Refusal to Pay Fees

Court Transcript Payment Disput

Termination of Agreement

Loving Message for Anniversary

Remove Marketing Company Ar

Add Team workspace

ChatGPT 4o



- Quiz me on world capitals
- Email for plumber quote
- Write a story in my favorite genre
- Plan a relaxing day

| Message ChatGPT

Close sidebar

Data Analyst

PI Legal YouTube Scr...

SEO Audit Tool

Explore GPTs

Today

Voter Data Analysis Request

Yesterday

Install Garage Drain Bay Village

Previous 7 Days

Dynamic Duo Democratic Debut

AI Terms Word Cloud

AI in US Politics

Nerve injury risk in ABG

Song description prompt.

Refusal to Pay Fees

Court Transcript Payment Disput

Termination of Agreement

Loving Message for Anniversary

Remove Marketing Company Ar

Add Team workspace

ChatGPT 4o

Write an introduction with a witty joke for my presentation at the Advanced Appellate Advocacy Seminar.



Quiz me on world capitals



Email for plumber quote



Write a story in my favorite genre



Plan a relaxing day



Message ChatGPT



Data Analyst

PI Legal YouTube Scr...

SEO Audit Tool

Explore GPTs

Today

Voter Data Analysis Request

Yesterday

Install Garage Drain Bay Village

Previous 7 Days

Dynamic Duo Democratic Debut

AI Terms Word Cloud

AI in US Politics

Nerve injury risk in ABG

Song description prompt.

Refusal to Pay Fees

Court Transcript Payment Disput

Termination of Agreement

Loving Message for Anniversary

Remove Marketing Company Ar

Add Team workspace

ChatGPT 4o



- Quiz me on world capitals
- Email for plumber quote
- Write a story in my favorite genre
- Plan a relaxing day



Message ChatGPT

Write an introduction with a witty joke for my presentation at the Advanced Appellate Advocacy Seminar.





Absolutely! Here's a draft introduction with a witty joke for your presentation:

Generative Voice AI

Convert text to speech online for free with our AI voice generator. Create natural AI voices instantly in any language - perfect for video creators, developers, and businesses.

Click on a language to convert text to speech:

English Chinese Spanish Hindi Portuguese French German
Japanese Arabic Russian Korean Indonesian Italian Dutch Turkish Polish Swedish Filipino Malay
Romanian Ukrainian Greek Czech Danish Finnish Bulgarian Croatian Slovak Tamil

Eleven lets you voice any length of text in top quality, all while automatically matching what is being said with how it's being said. The model works best on longer texts, so type in at least a few sentences.

— Daniel ▾

0 / 333



Audio



Generate audio

Import audio

You can write the beginning of a dialogue,
or you can try typing a single word.

0 / 300

Select a voice



Character



Drag and drop an image here, click to upload, or paste from your
clipboard

Supported image format: .jpeg / .png / .webp

Upload

Download

Describe your character and click "Create" to generate



Create

Video



Your generated video will appear here!

Click Generate video button

Download

Share

Generate video

Audio



Generate audio

Import audio

You can write the beginning of a dialogue,
or you can try typing a single word.

0 / 300

Select a voice



Character



Drag and drop your image or upload from your gallery



Upload

Download

Describe your character and click "Create" to generate



Create

Video



Your generated video will appear here!

Click Generate video button

Download

Share

Generate video



Real-Life Examples of AI Deepfakes

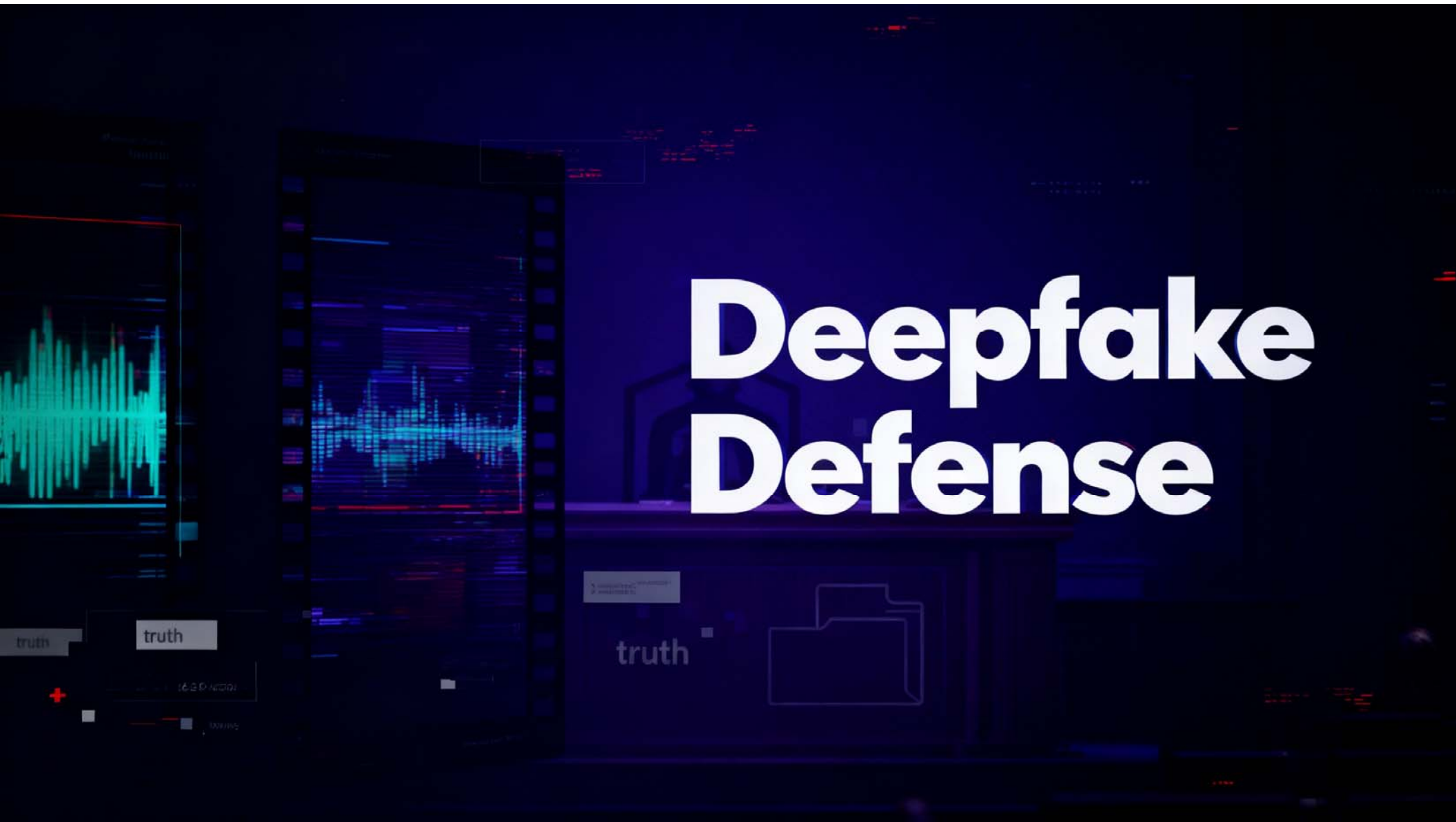




Ethics of AI Deepfakes



Deepfake Defense



Access to Justice

