

A photograph of a person's hands typing on a laptop keyboard. In the background, a large computer monitor is visible on a desk. The image is partially obscured by a dark blue overlay on the left side, which contains the title and speaker information.

Truth or Tech – Navigating AI-Generated Evidence in the Courtroom

Brian M. Chase, Esq.
Managing Director of Digital
Forensics and eDiscovery

BChase@ArcherHall.com

855.839.9084



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Higher-Ed



Medical
Malpractice



IP Theft



Bankruptcy

About Brian Chase

- Undergraduate Degree in MIS from the University of Arizona
- Law Degree from the University of Arizona
- Licensed to practice law in Arizona and New York
- Managing Director of Digital Forensics at ArcherHall
- Adjunct professor of law at the University of Arizona
- Testimony in State and Federal Court, Civil and Criminal Cases
- Misdemeanor and felony trials as an attorney

AI – The Next Big Problem

AI vs. Generative AI

Traditional AI:

- Trained to accomplish specific tasks, such as identifying images. Primary used to analyze data

Generative AI:

- Focused on creating new content. This is the type that we have been seeing in the news.

Generative AI

Gemini

 perplexity

ChatGPT 

 Copilot

ChatGPT

November 2022: Version 3.5

- Took the bar exam and failed.
Finished in the 10th Percentile

March 2023: Version 4.0

- Took the bar exam and passed.
Finished in the 90th Percentile

Legal Sector Generative AI Tools



Ethical Duties

Competence

Lawyers must have a reasonable understanding of the capabilities and limitations of the specific generative AI technology that the lawyer might use.

Confidentiality

Must be careful about using tools that could result in disclosing client data

Meritorious Claims

Must make sure the AI tools product real results, and not create fake cases

Supervisory Responsibilities

Must supervisor the tools and the use of the tools by other staff

So What Do We Do?

- “I’m not sure this is the crisis that it’s been painted as, and I’m not sure that Judges don’t have the tools already to deal with this.” – U.S. 2nd Circuit Court of Appeals Judge
- “I think we have adequate tools at the moment, but this may change as things develop.” – U.S. District Court Judge

US Evidence Committee

- **Committee Chair:** Panels agrees litigants concerns that rules, as written, do not work for challenging deep fakes.
- **Judge Grimm Proposal:**
- **Proposed New Rule 901(c) to address “Deepfakes”**
 - 901(c): Potentially Fabricated or Altered Electronic Evidence. If a party challenging the authenticity of computer-generated or other electronic evidence demonstrates to the court that it is more likely than not either fabricated, or altered in whole or in part, the evidence is admissible only if the proponent demonstrates that its probative value outweighs its prejudicial effect on the party challenging the evidence.

State of Washington v. Puloka

- Defense wanted to introduce AI-Enhanced video
- State retained a forensics expert
- Expert testified about how the AI program altered the video, including:
 - Increasing pixels 16x
 - Added information not in the original file
 - Altered shapes and colors in the video
- Judge excluded the use of the video

Images



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Deepfakes

Real or Fake?



Deepfakes Real or Fake?

Authentication

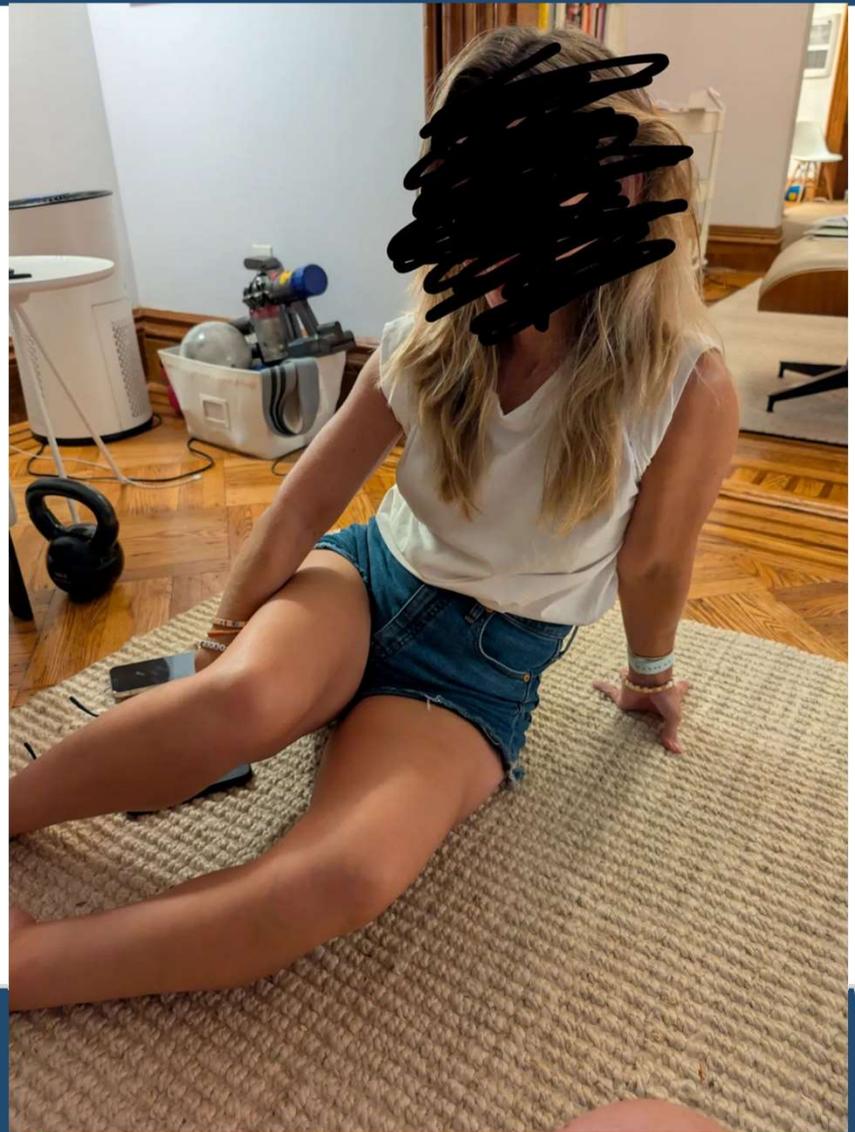
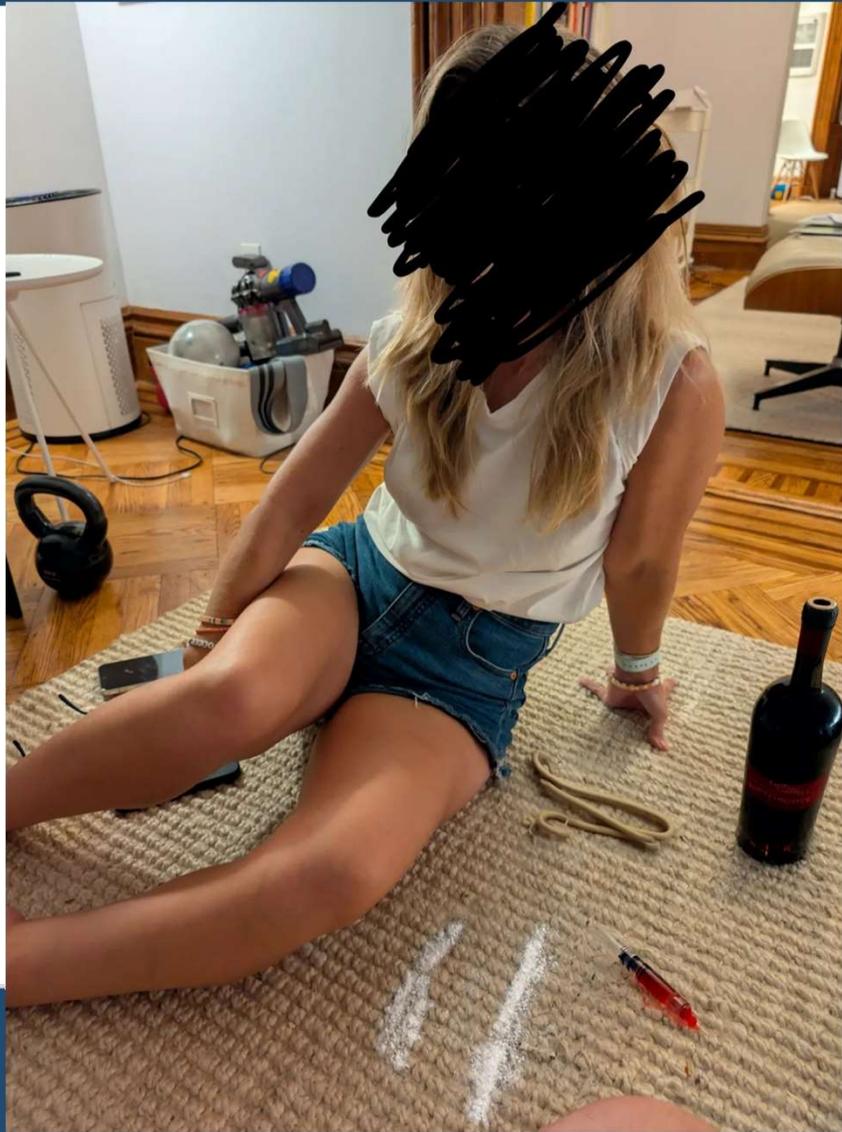
- FRE 901: To satisfy the requirement of authenticating or identifying an item of evidence, the proponent must produce evidence sufficient to support a finding that the item is what the proponent claims it is.
- Typical Question: Does the photograph fairly and accurately depict "X"?
- Judge must determine if a reasonable juror could find the item is what the proponent claims it is.











ht?

The problems

- Editing photos is easier than ever
- Detecting AI generated pictures is difficult
- Many AI tools do not have safeguards
- Our standard authentication rules do not work anymore

Where is the line?

AI
Enhancement?

Digital Zoom?

Computational
Photography?

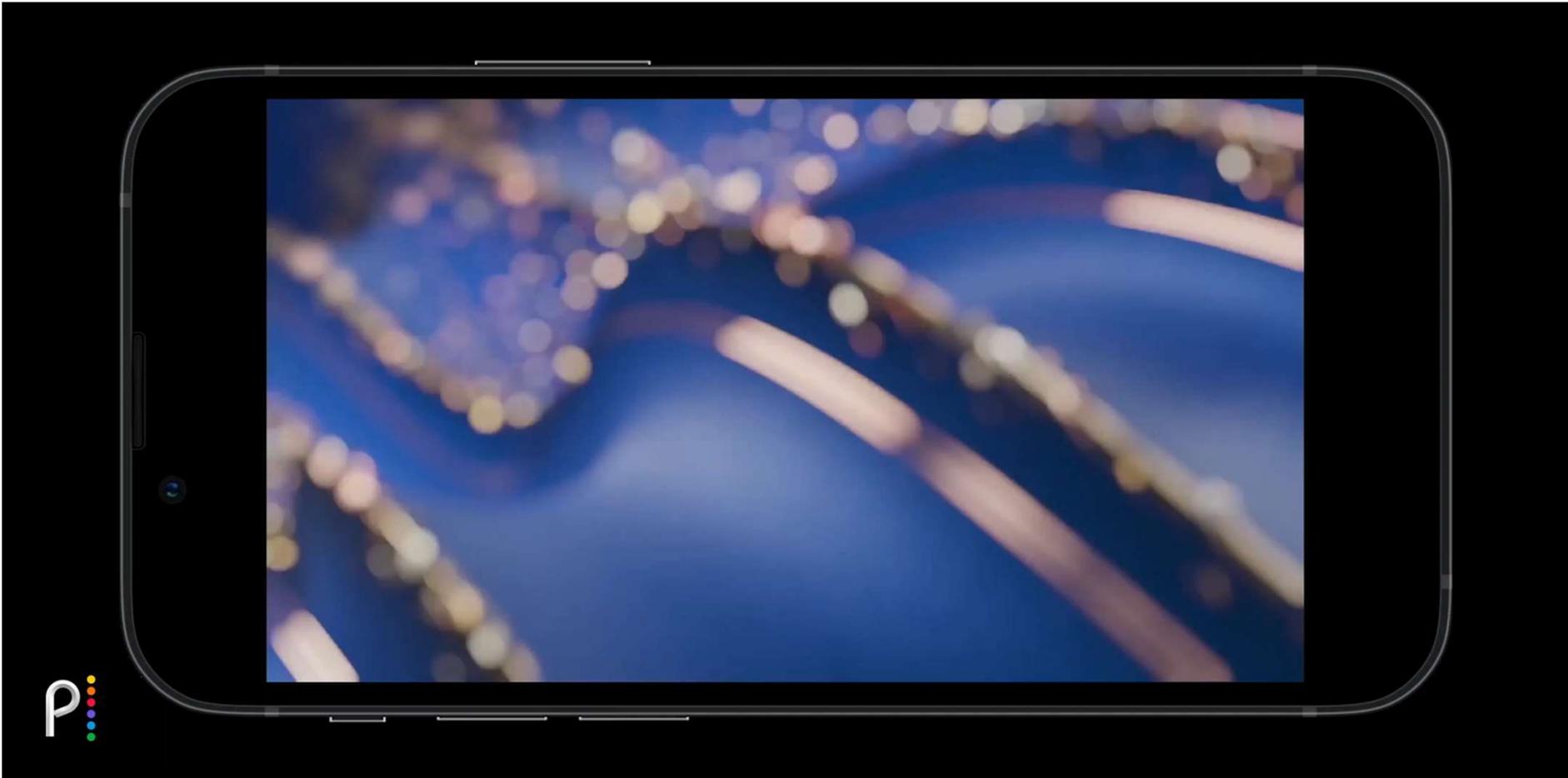
Voice



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FRE 901(b)(5)

- ***Opinion About a Voice.*** An opinion identifying a person's voice — whether heard firsthand or through mechanical or electronic transmission or recording — based on hearing the voice at any time under circumstances that connect it with the alleged speaker.



ElevenLabs

AI AUDIO ▾ SOLUTIONS ▾ API PRICING COMPANY ▾

 VOICE CLONING

Create a replica of your voice that sounds just like you

Automate video voiceovers, ad reads, podcasts, and more, in your own voice

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INSTANT VOICE CLONING

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Starter

\$5/mo

For hobbyists creating projects with AI audio.

Subscribe

30,000 credits per month (~30 min audio)

Everything in free, plus

- Clone your voice with as little as 1 minute of audio
- Access to the Dubbing Studio for more control over translation & timing
- License to use ElevenLabs for commercial use



How Voice Cloning Works

Speak. Record. Done.

Voice cloning with Speechify simplifies complex speech synthesis. Simply speak into your laptop for 30 seconds, press record, and that's it!

[Try it. Create Your AI Voice for Free](#)

MOST POPULAR

Professional

For professionals and teams

\$32.08

per month / user

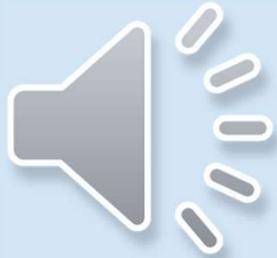
[Buy Now](#)

Everything in Basic

- ✓ AI Avatars
- ✓ Voice Cloning
- ✓ 100 hours of voice generation per user/year
- ✓ 36 hours of Dubbing per user/year
- ✓ 100 hours Video and Audio Transcription
- ✓ 1 hour of AI Avatar Video/year

Real or AI?

Sample 1



Sample 2



Sample 3



Sample 4



Handwriting

FRE 901(b)(2)

Nonexpert Opinion About Handwriting.

- A nonexpert's opinion that handwriting is genuine, based on a familiarity with it that was not acquired for the current litigation.

Flux - AI Generated Handwriting

POKEMON STATS

SMORTLE	16	21
CHORTLE	4	19
SNYWINDER	5	20
GIBBINS	1	14
FIREMANDER	2	24

PROJECT PLANNING NOTES

1 MERCEDES GOOD WORK 7/4/05

2

3 REPLACE NEUTRAL SAFETY SWITCH

4 CHANGE TRANS FLUID & FILTER

5 LUBE SPEEDO CABLE

6 NEW SERPANTINE BELT

7 CHANGE ENGINE OIL & FILTER

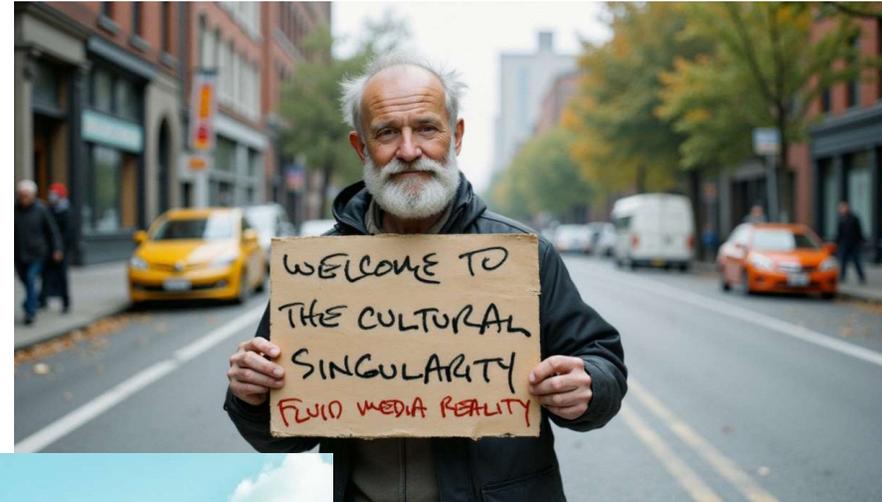
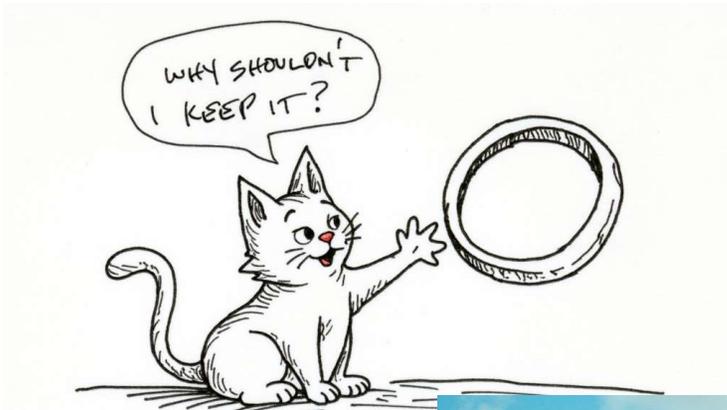
8 REPLACE BAD GLOW PLUGS

9

10

11

Take it a step further



The Future

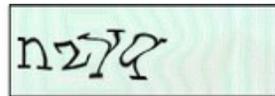
Are you an AI?



Gimpy



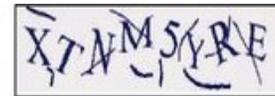
EZ Gimpy



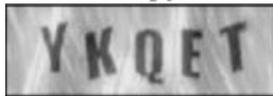
Gimpy-r



Mailblocks



MSN



Register



Yahoo



Ticketmaster



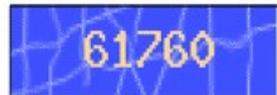
Google



Holiday Inn



BotBlock



BotCheck



Megaupload



LinkedIn



Cryptograph



Chinese CAPTCHA



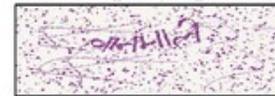
Baidu



3D CAPTCHA



STE3D-CAP



DevaCAPTCHA



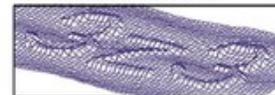
Gurmukhi
CAPTCHA



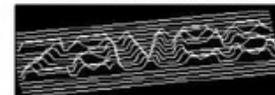
Arabic CAPTCHA



BotDetect



TeaBag CAPTCHA
1.2



Super CAPTCHA

Ethical Duties?

Model Rule 3.3

(a) A lawyer shall not knowingly:

- (1) make a false statement of fact or law to a tribunal or fail to correct a false statement of material fact or law previously made to the tribunal by the lawyer;
- (2) fail to disclose to the tribunal legal authority in the controlling jurisdiction known to the lawyer to be directly adverse to the position of the client and not disclosed by opposing counsel; or
- (3) **offer evidence that the lawyer knows to be false.** If a lawyer, the lawyer's client, or a witness called by the lawyer, has offered material evidence and the lawyer comes to know of its falsity, the lawyer shall take reasonable remedial measures, including, if necessary, disclosure to the tribunal. A lawyer may refuse to offer evidence, other than the testimony of a defendant in a criminal matter, that the lawyer reasonably believes is false.

Detection



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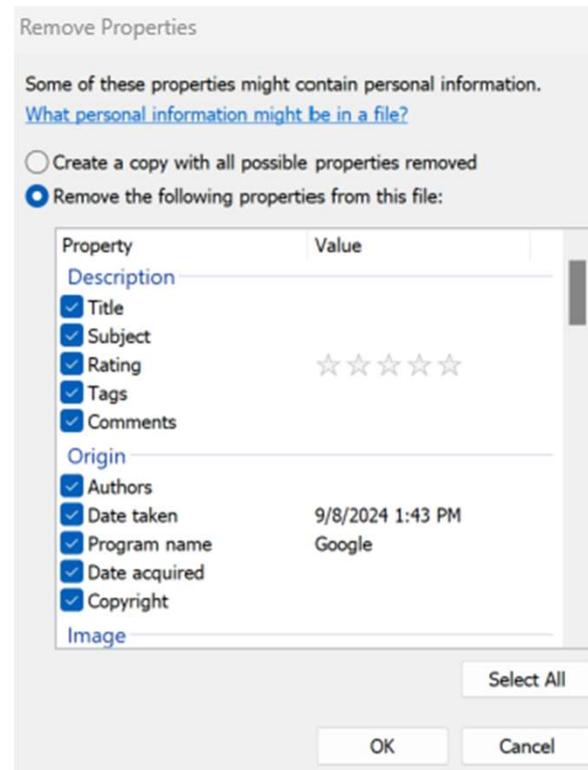
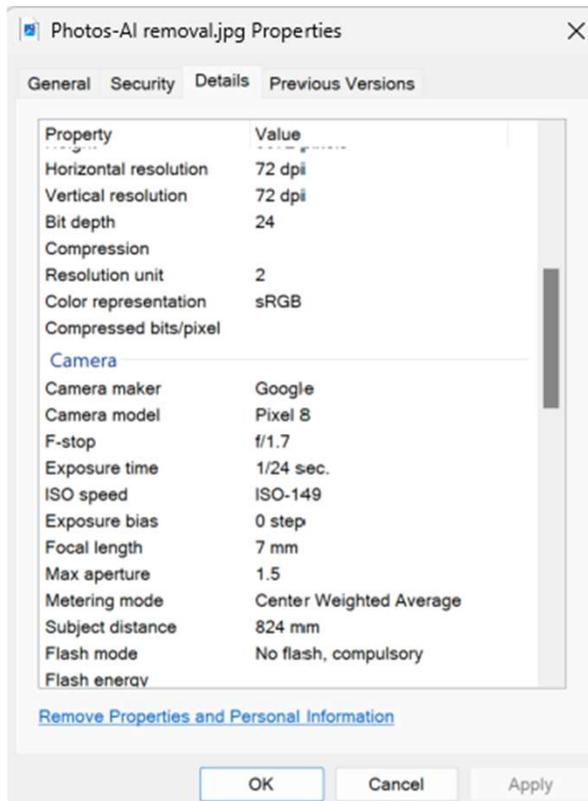
	---- ExifIFD ----
ExposureTime	1/24
FNumber	1.7
ExposureProgram	Program AE
ISO	149
ExifVersion	0232
DateTimeOriginal	2024:09:08 13:43:20
CreateDate	2024:09:08 13:43:20
OffsetTime	-07:00
OffsetTimeOriginal	-07:00
OffsetTimeDigitized	-07:00
ComponentsConfiguration	Y, Cb, Cr, -
ShutterSpeedValue	1/24
ApertureValue	1.7
BrightnessValue	0.51
ExposureCompensation	0
MaxApertureValue	1.7
SubjectDistance	0.824 m
MeteringMode	Center-weighted average
Flash	Off, Did not fire
FocalLength	6.9 mm
SubSecTime	549
SubSecTimeOriginal	549
SubSecTimeDigitized	549
FlashpixVersion	0100

	---- ExifIFD ----
LensModel	Pixel 8 back camera 6.9mm f/1.68
LensMake	Google
ISO	149
ExposureProgram	Program AE
CompositelImage	Composite Image Captured While Sho
FNumber	1.7
ExposureTime	1/24
SensingMethod	One-chip color area
SubSecTimeDigitized	549
OffsetTimeDigitized	-07:00
SubSecTimeOriginal	549
OffsetTimeOriginal	-07:00
SubSecTime	549
OffsetTime	-07:00
SubjectDistanceRange	Macro
Sharpness	Normal
FocalLength	6.9 mm
Flash	Off, Did not fire
Saturation	Normal
Contrast	Normal
MeteringMode	Center-weighted average
SceneCaptureType	Standard
SubjectDistance	0.824 m
FocalLengthIn35mmForma	49 mm

	---- IFD0 ----
Make	Google
Model	Pixel 8
Orientation	Horizontal (normal)
XResolution	72
YResolution	72
ResolutionUnit	inches
Software	HDR+ 1.0.641377693zd
ModifyDate	2024:09:08 13:43:20
YCbCrPositioning	Centered

	---- IFD0 ----
ImageWidth	4080
ImageHeight	3072
ResolutionUnit	inches
Make	Google
Model	Pixel 8
Software	Google
ModifyDate	2024:09:08 13:51:21
Orientation	Horizontal (normal)
YCbCrPositioning	Centered
XResolution	72
YResolution	72

Another Problem...



	EXIF
Make	-
Model	-
LensModel	Pixel 8 back camera 6.9mm f/1.68
ExposureTime	1/24
FNumber	1.7
ISO	-
FocalLength	6.9 mm
Flash#	-
Orientation#	Horizontal (normal)
DateTimeOriginal	-
CreateDate	-
Artist*	-
Copyright	-
Software	-
Geotagged?	*NO*

AI Detection Tools

- Expensive and requires experts
- Currently about 65% accurate
- Many are just a “black box” and have not been tested

Cellphone Forensics

Name: VoicesAI_Squarepants_Oh_no_I_forgot_the_K_09
2913_10092024.mp3

Type: Audio

Size (bytes): 30929

Path: iPhone/mobile/Containers/Data/Application/
com.leonfiedler.voiceai/Documents/
VoicesAI_Squarepants_Oh_no_I_forgot_the_K_09
2913_10092024.mp3

Created: 9/10/2024 9:29:01 AM(UTC-7)

Accessed: 9/10/2024 9:29:01 AM(UTC-7)

Modified: 9/10/2024 9:29:01 AM(UTC-7)

Cellphone Forensics

Name: VoicesAI_Squarepants_Oh_no_I_forgot_the_K_09
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Modified: 9/10/2024 9:29:01 AM(UTC-7)

Cellphone Forensics

↑ Last Visited ▼	Title ▼
9/10/2024 9:09:18 AM(UTC-7)	ChatGPT
9/10/2024 9:10:28 AM(UTC-7)	ChatGPT
9/10/2024 9:10:28 AM(UTC-7)	ChatGPT
9/10/2024 9:11:01 AM(UTC-7)	ChatGPT
9/10/2024 9:11:06 AM(UTC-7)	ElevenLabs: Free Text to Speech & AI Voice...
9/10/2024 9:11:07 AM(UTC-7)	ElevenLabs: Free Text to Speech & AI Voice...
9/10/2024 9:11:07 AM(UTC-7)	ElevenLabs: Free Text to Speech & AI Voice...

Cellphone Forensics

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9/10/2024 9:09:18 AM(UTC-7)	ChatGPT
9/10/2024 9:10:28 AM(UTC-7)	ChatGPT
9/10/2024 9:10:28 AM(UTC-7)	ChatGPT
9/10/2024 9:11:01 AM(UTC-7)	ChatGPT
9/10/2024 9:11:06 AM(UTC-7)	ElevenLabs: Free Text to Speech & AI Voice...
9/10/2024 9:11:07 AM(UTC-7)	ElevenLabs: Free Text to Speech & AI Voice...
9/10/2024 9:11:07 AM(UTC-7)	ElevenLabs: Free Text to Speech & AI Voice...

» Web History Go to ▼

Title: ElevenLabs: Free Text to Speech & AI Voice Generator | ElevenLabs

Last Visited: 9/10/2024 9:11:07 AM(UTC-7)

URL: <https://elevenlabs.io/>

Visits: 2



Cellphone Forensics – Installed Apps

» Installed Application

Name: ChatGPT
Version:
Operation Mode: Foreground
Description:
Identifier: com.openai.chat
Application ID: 9A82F1A0-8B06-410E-BA04-A82DA26901B8

» Installed Application

Name: VoiceAI
Version:
Operation Mode: Foreground
Description:
Identifier: com.neutronlabs.voiceai.VoiceAI
Application ID: A97EE769-DE1A-452E-9079-BFFB73E02DCE

» Installed Application

Name: AI Voice Clone
Version:
Operation Mode: Foreground
Description:
Identifier: com.bloodhound.Eleven-Labs
Application ID: 093EE2A9-E051-4B6E-8AAA-DDE640C8C27E

» Installed Application

Name: Character.AI
Version:
Operation Mode: Foreground
Description:
Identifier: ai.character.app
Application ID: 50F9FB02-AF5F-4827-A9D2-4DEBFB9961FA

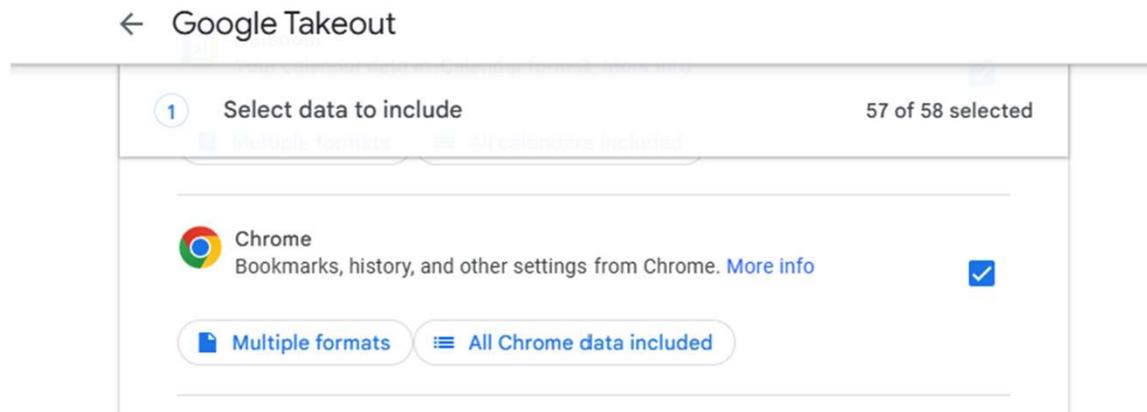
» Installed Application

Go to ▾

Name: AI Chat
Version:
Operation Mode: Foreground
Description:
Identifier: com.tappz.aichat
Application ID: 579D9153-96C3-4EA6-93B6-9B4B22ECB861



■ Google Take: Chrome browser history



Other Sources

Chrome content options

Choose specific Chrome data for your export

[Deselect all](#)

- Addresses and more
- Bookmarks
- Device Information
- Dictionary
- Extensions
- History
- OS Settings
- Reading List
- Settings

Cancel [OK](#)

Detection – Best Tips

- Get the native with metadata
- Look at browser history
- Get an expert
 - Digital forensics expert to analyze cellphones/computers/tablets
 - Media expert to analyze pictures, videos, and audio

We'd love to hear from
you!

Brian M. Chase, Esq.
Managing Director
Digital Forensics

bchase@archerhall.com
(855) 839-9084

