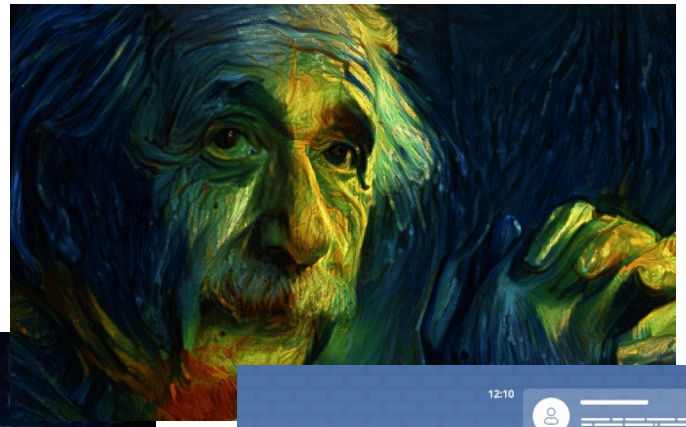
CHATGPT AND COMMUNICATION:

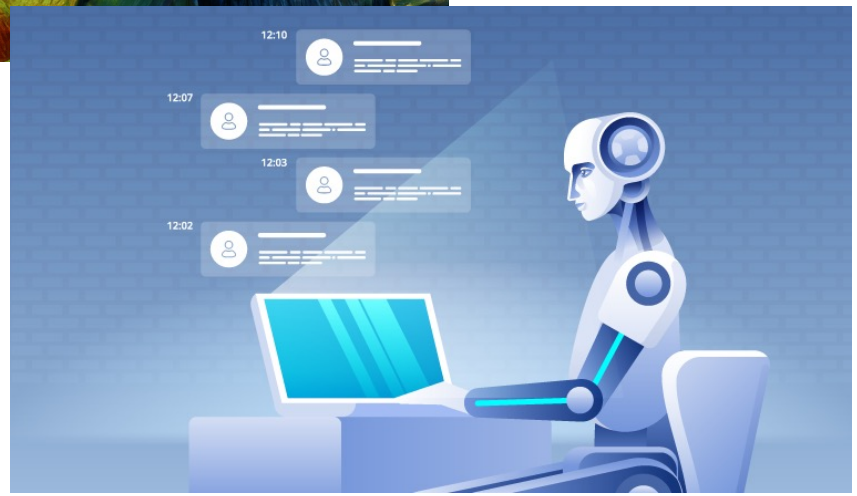
HOW GENERATIVE AI WILL TRANSFORM OUR FIELD

ANAND RAO – MAY 5, 2023

AGENDA

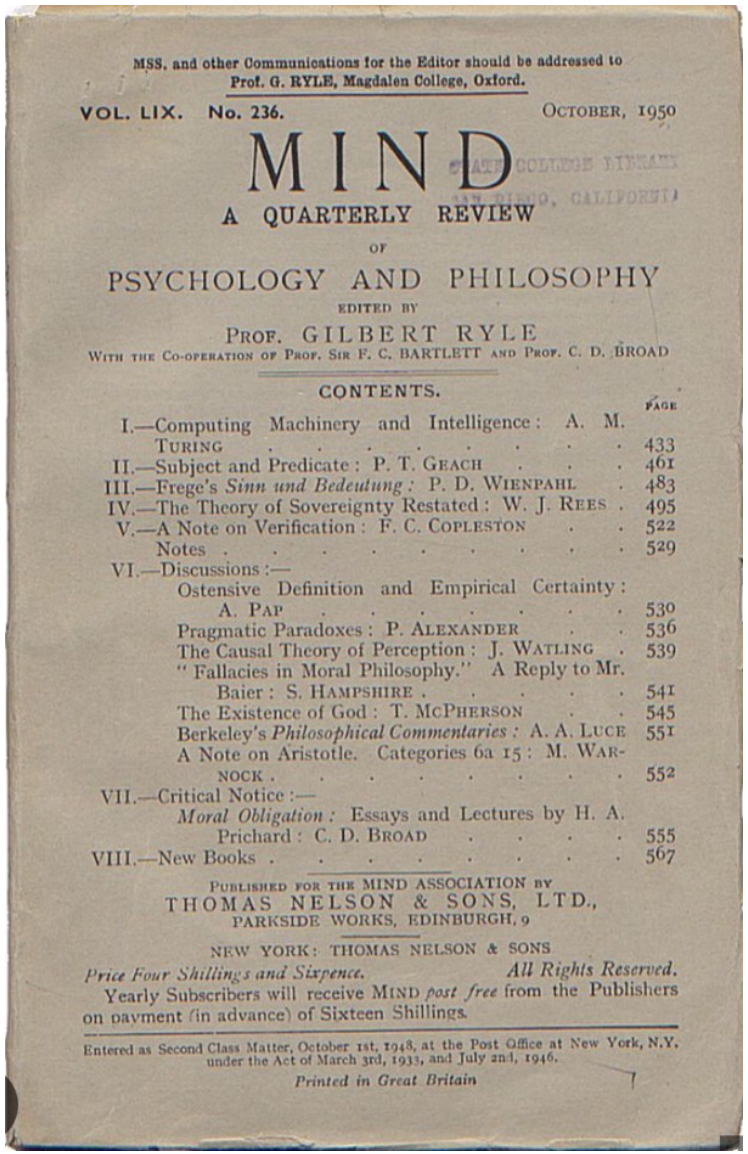
- AI/Machine Learning/Generative AI/Bot
- Chat GPT, GAI, & Present Limitations
- Missing the Future for the Present
- The Promise of GAI
- The Peril of GAI
- It's What We Don't Know…





The Technologies

ARTIFICIAL INTELLIGENCE | MACHINE LEARNING | GENERATIVE AI | BOTS



MSS. and other Communications for the Editor should be addressed to
Prof. G. RYLE, Magdalen College, Oxford.

VOL. LIX. No. 236. OCTOBER, 1950

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

EDITED BY

PROF. GILBERT RYLE

WITH THE CO-OPERATION OF PROF. SIR F. C. BARTLETT AND PROF. C. D. BROAD

STATE COLLEGE LIBRARY
SAN DIEGO, CALIFORNIA

CONTENTS.

	PAGE
I.—Computing Machinery and Intelligence: A. M. TURING	433
II.—Subject and Predicate: P. T. GEACH	461
III.—Frege's *Sinn und Bedeutung*: P. D. WIENPAHL	483
IV.—The Theory of Sovereignty Restated: W. J. REES	495
V.—A Note on Verification: F. C. COPLESTON	522
Notes	529
VI.—Discussions:—	
Ostensive Definition and Empirical Certainty: A. PAP	530
Pragmatic Paradoxes: P. ALEXANDER	536
The Causal Theory of Perception: J. WATLING	539
"Fallacies in Moral Philosophy." A Reply to Mr. Baier: S. HAMPSHIRE	541
The Existence of God: T. MCPHERSON	545
Berkeley's *Philosophical Commentaries*: A. A. LUCE	551
A Note on Aristotle. Categories 6a 15: M. WARNOCK	552
VII.—Critical Notice:—	
Moral Obligation: Essays and Lectures by H. A. Prichard: C. D. BROAD	555
VIII.—New Books	567

PUBLISHED FOR THE MIND ASSOCIATION BY
THOMAS NELSON & SONS, LTD.,
PARKSIDE WORKS, EDINBURGH, 9

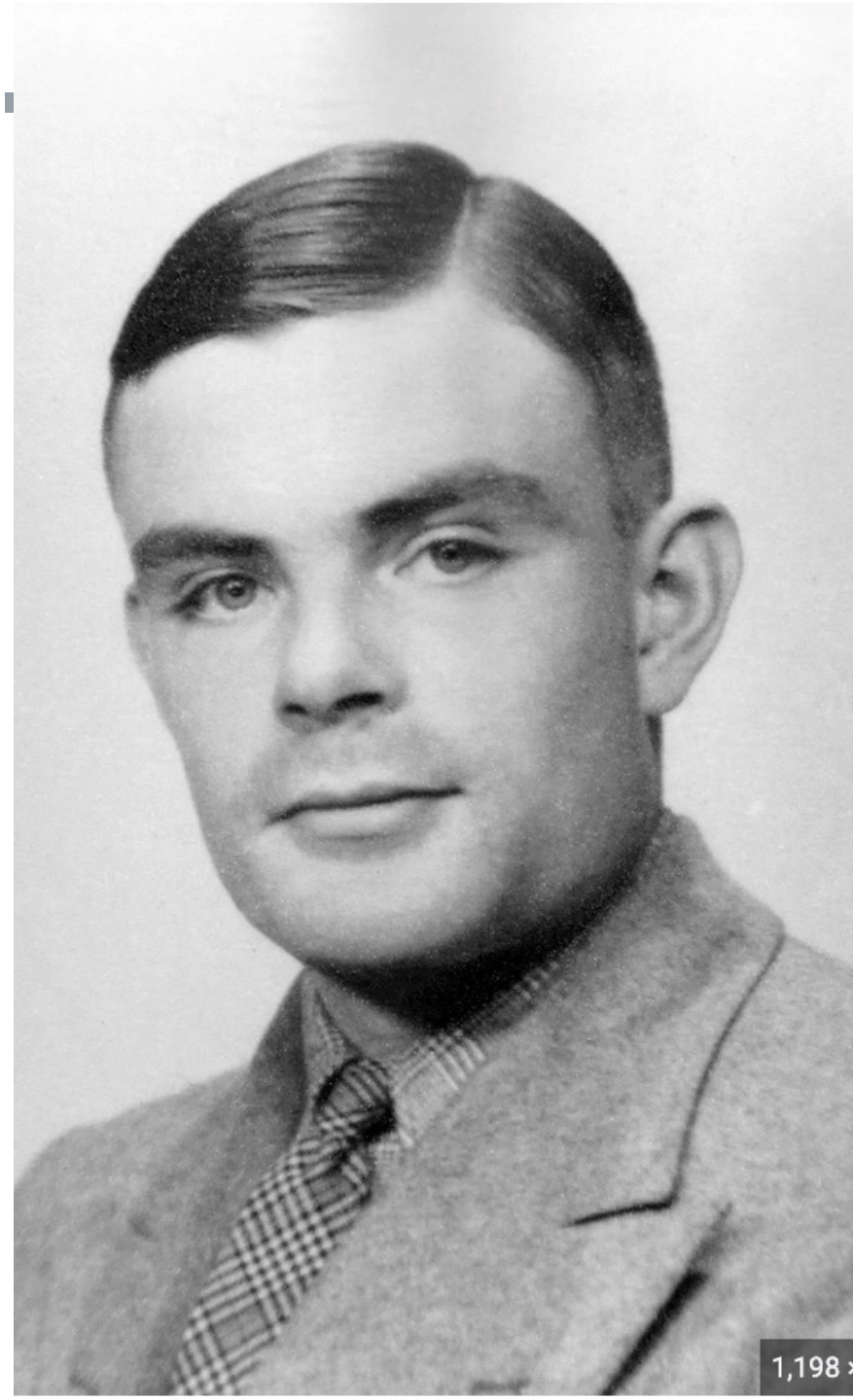
NEW YORK: THOMAS NELSON & SONS

Price Four Shillings and Sixpence. *All Rights Reserved.*

Yearly Subscribers will receive MIND *post free* from the Publishers on payment (in advance) of Sixteen Shillings.

Entered as Second Class Matter, October 1st, 1948, at the Post Office at New York, N.Y. under the Act of March 3rd, 1933, and July 2nd, 1946.

Printed in Great Britain

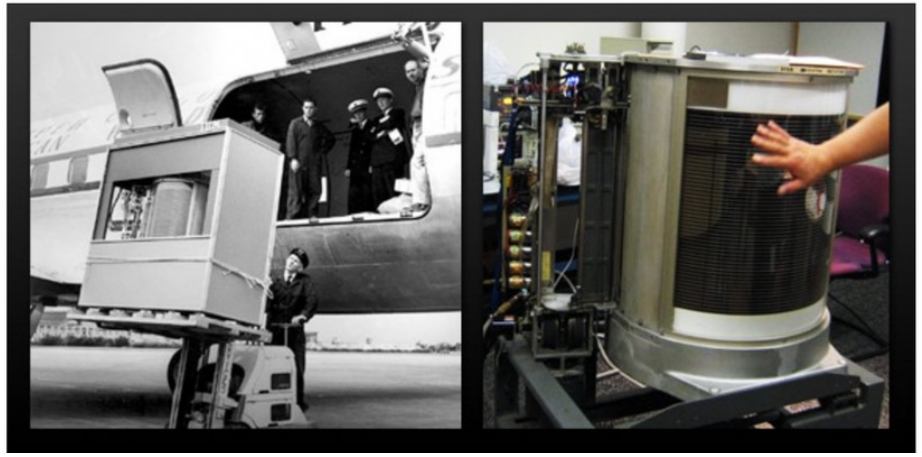


1950s

5 MB disks

Dartmouth Conference

The first hard disk drive was the IBM Model 350 Disk File that came with the IBM 305 RAMAC computer in 1956. It had 50 24-inch discs with a total storage capacity of 5 million characters (just under 5 MB).

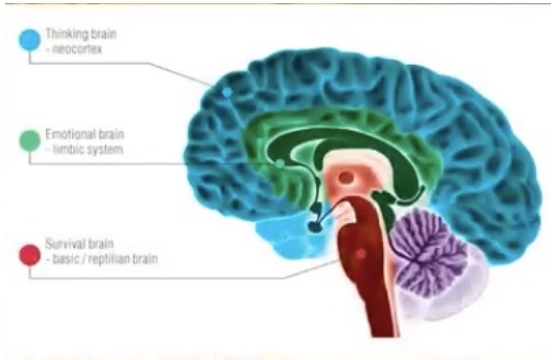


Artificial Intelligence

- Simulate human intelligence capabilities

Intelligence

- No general agreed-upon definition
- Involves reasoning, problem solving, learning
- requires perception, attention, memory, language, planning
- sentient, consciousness, self-aware



ARTIFICIAL (VERY) NARROW INTELLIGENCE

WEAK ARTIFICIAL INTELLIGENCE

FACIAL RECOGNITION/SPEECH RECOGNITION

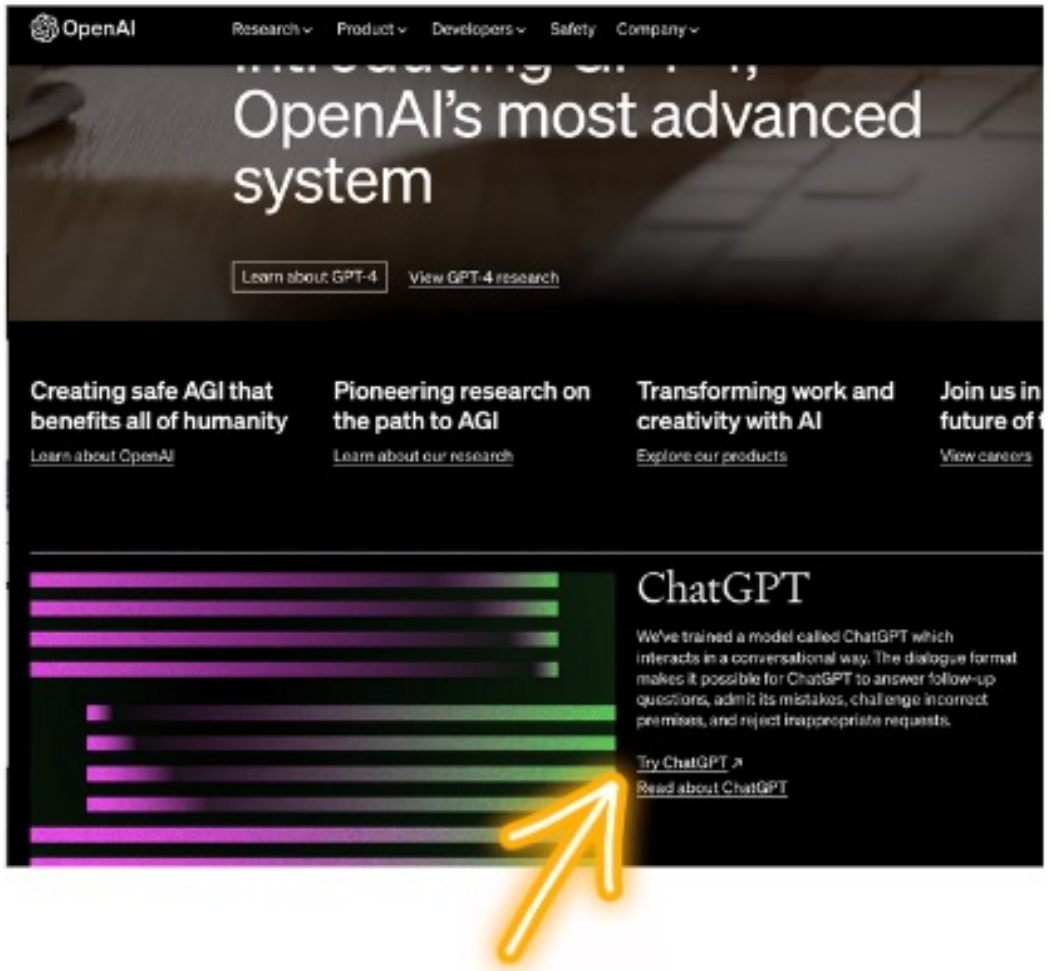
PREDICT SCORES AND MARKETS

LIMITED INTERACTION (CUSTOMER SERVICE)

We have so much information at our fingertips.

What's Different

- Ask it anything
- Natural language



Not an App

ChatGPT

01 GENERATIVE

02 PRETRAINED

03 TRANSFORMER

PRE-TRAINED

CONTENT

.

MACHINE LEARNING

SELF & SUPERVISED LEARNING

RLHF (Reinforcement Learning from Human Feedback)

PREDICTS

Artificial Intelligence

Large Language Model

It produces output based on training,
it is not replicating content from a database.

I saw a cat... on the chair

I saw a cat... running after a dog

I saw a cat... in my dream

I saw a cat... in a book

Limits

01 FACTS

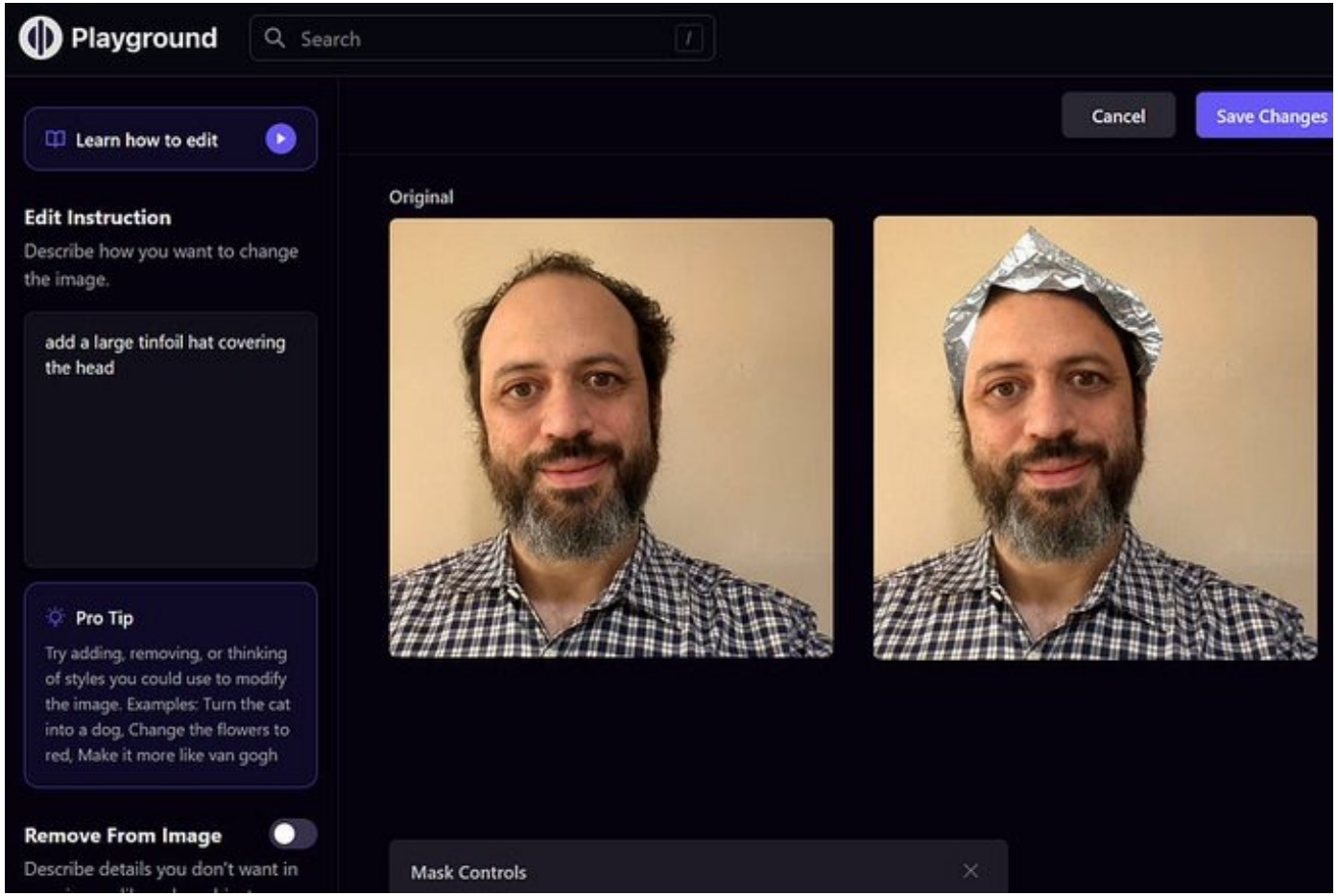
02 CITATIONS

03 POST 2021

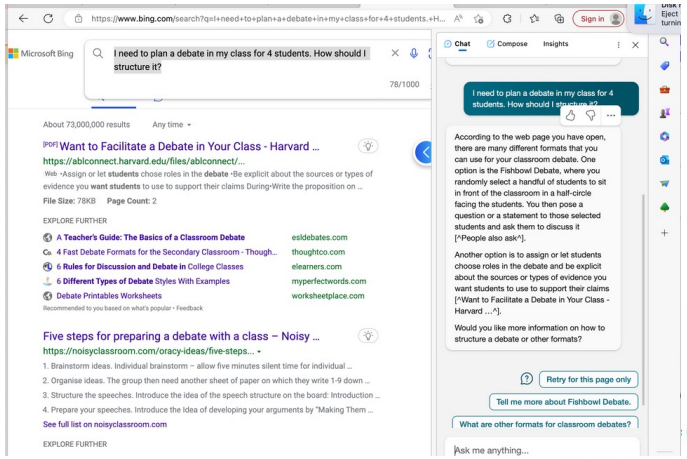
04 LIMITED MATH

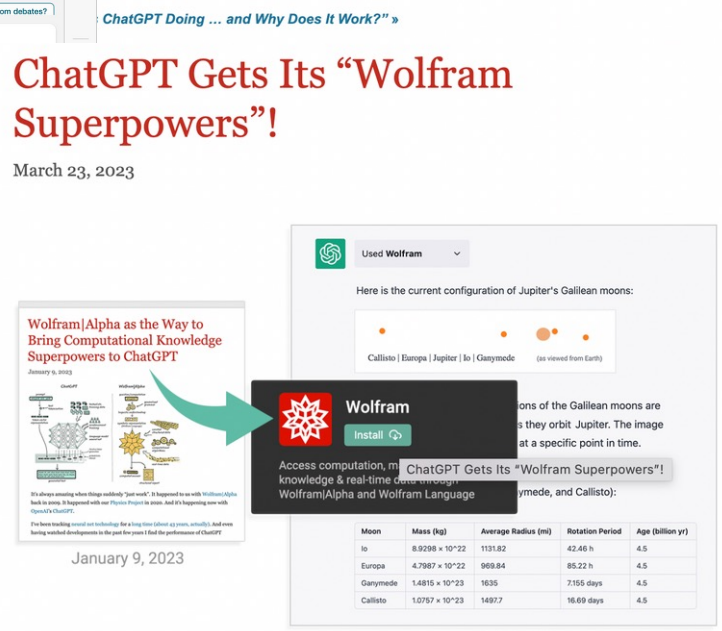
MISSING THE FUTURE FOR THE PRESENT

"THE WORST AI YOU'LL EVER USE IS THE ONE YOU ARE USING NOW." – ETHAN MOLLICK

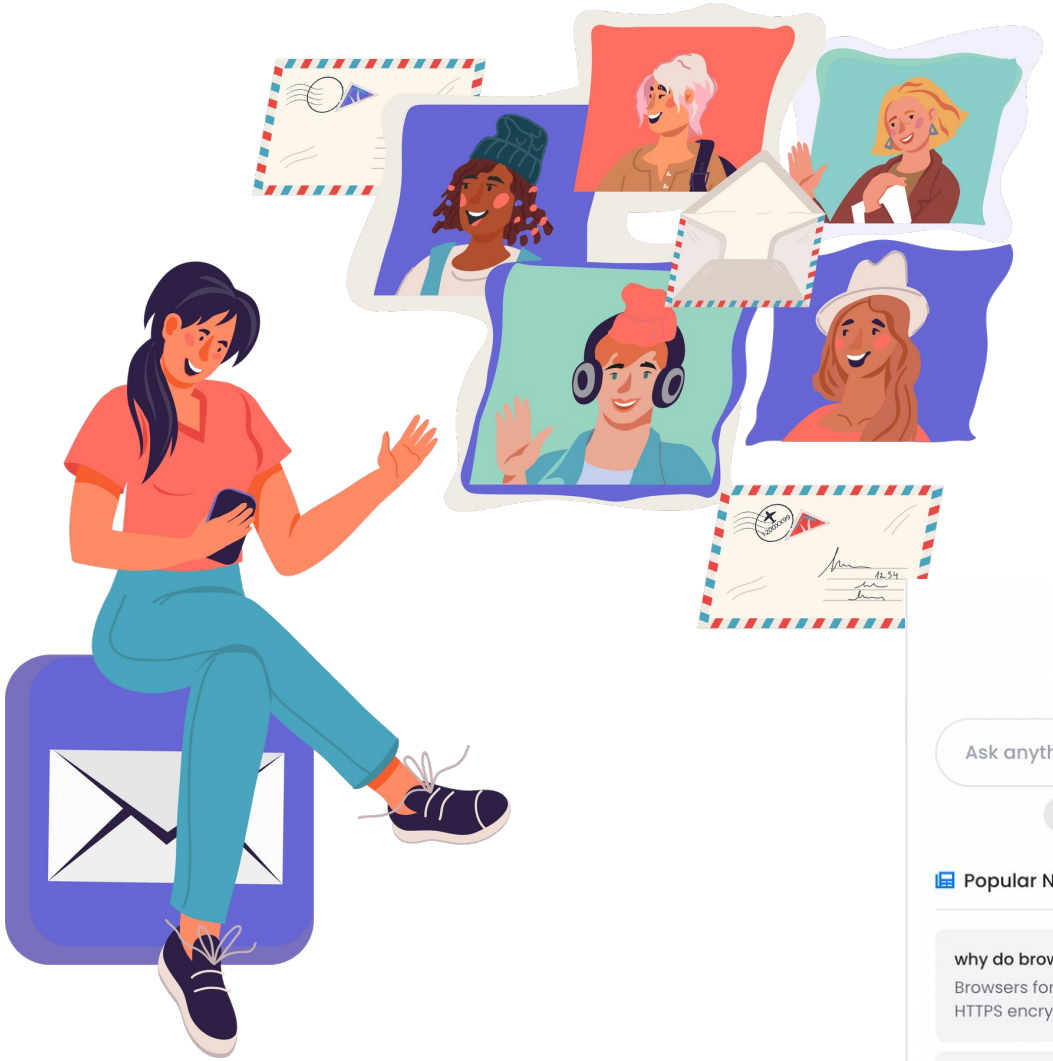


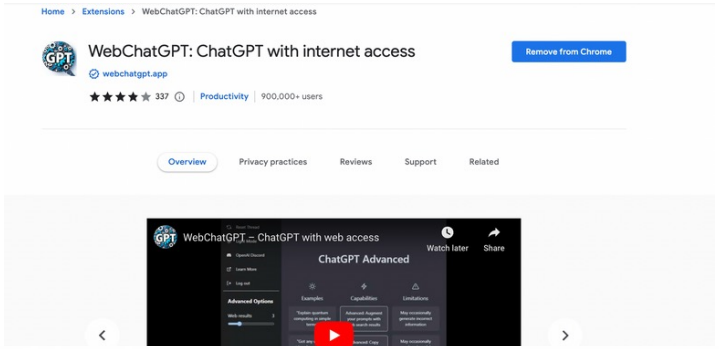
Phoning Friends

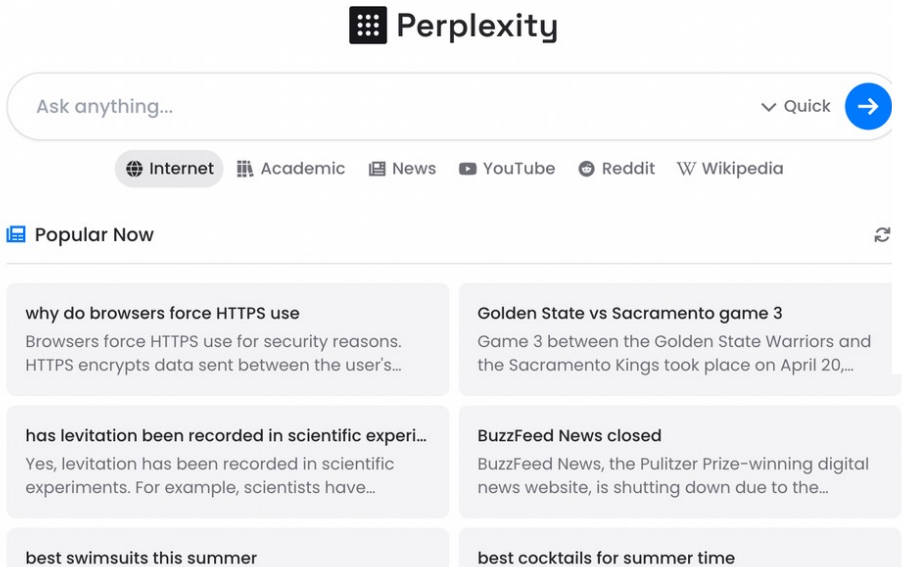


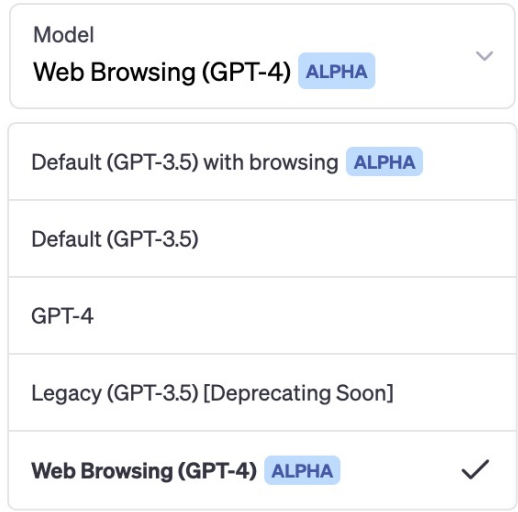


Phoning Friends









ChatGPT PLUS

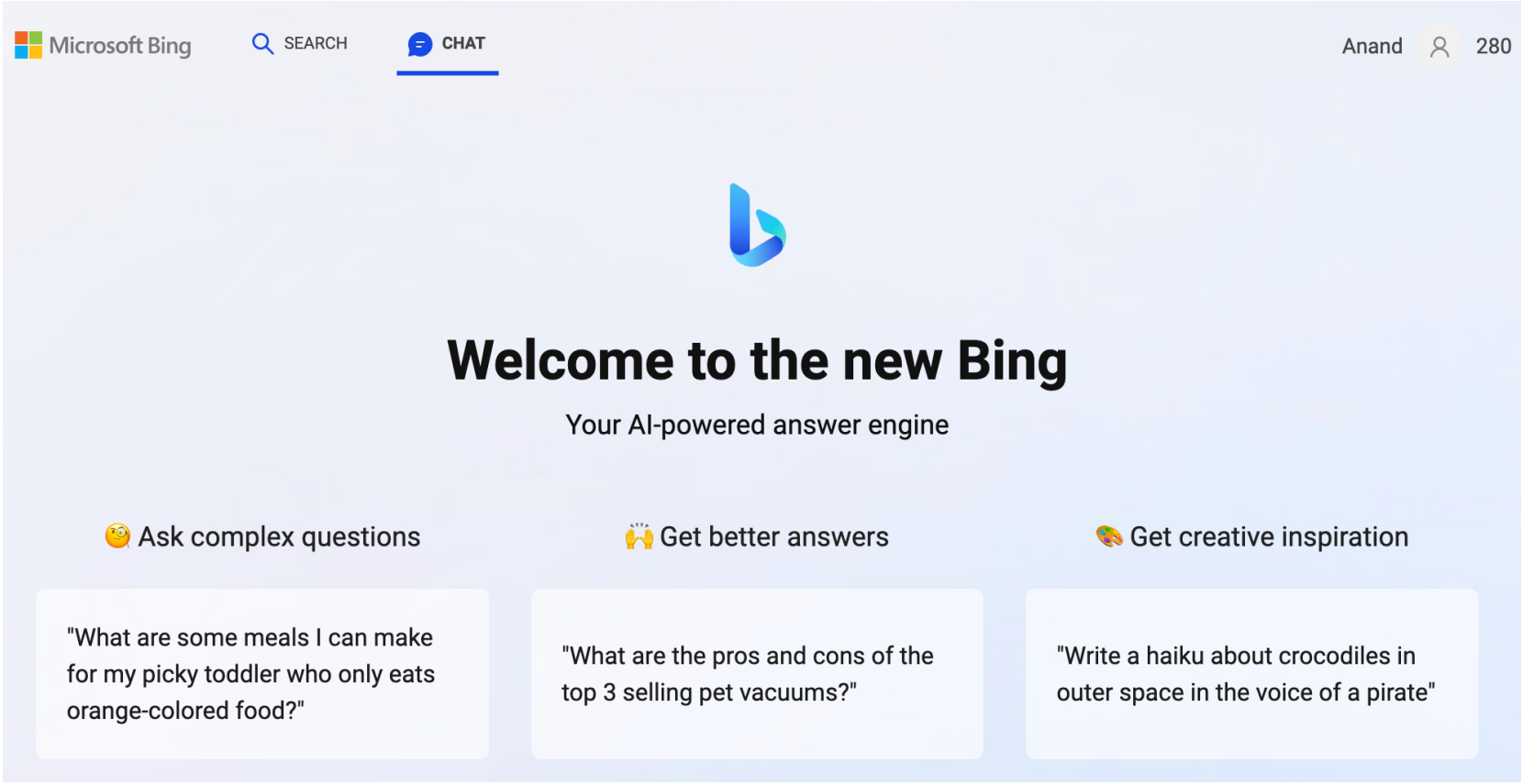
SAM ALTMAN ON CHATGPT VS. BING

- Sam Altman: *Yeah, Chat GPT is a horrible product... if you think about the way people want to integrate it into their workflow, the way that you want it to be able to use your own data, to integrate with your other applications and services, people are really just going to a site that sometimes works and sometimes it's down. They're typing in something. They're trying to get until they get it right. And they're copying the answer, and going to paste it somewhere else, and then going back, and trying to integrate that with search results. Or there are other workflows.*
- *It is cool, for sure. And people really love it, which makes us very happy. But no one would say this was a great, well-integrated product yet.*
- Casey Newton: *It's not the 1.0 version.*
- Sam Altman: *Yeah, it's the 0.7 or something like that. But there's so much value here, that people are willing to put up with it. And this [Bing] is a real product now.*

THE PROMISE OF GAI

BING

- Launched on Feb 6th
- Waitlist with preview access
- Built on Prometheus (GPT-3+)
- Live web searches
- 1 million signed up in 48 hours



MICROSOFT IS MAKING THE MOST OF ITS INVESTMENT

- Available Now:
  - Viva Sales
  - Azure Open AI Service
  - Teams Premium
- Expected Soon:
  - Outlook
  - Word
  - PowerPoint
  - Excel

MICROSOFT / TECH / ARTIFICIAL INTELLIGENCE

Microsoft to demo its new ChatGPT-like AI in Word, PowerPoint, and Outlook soon

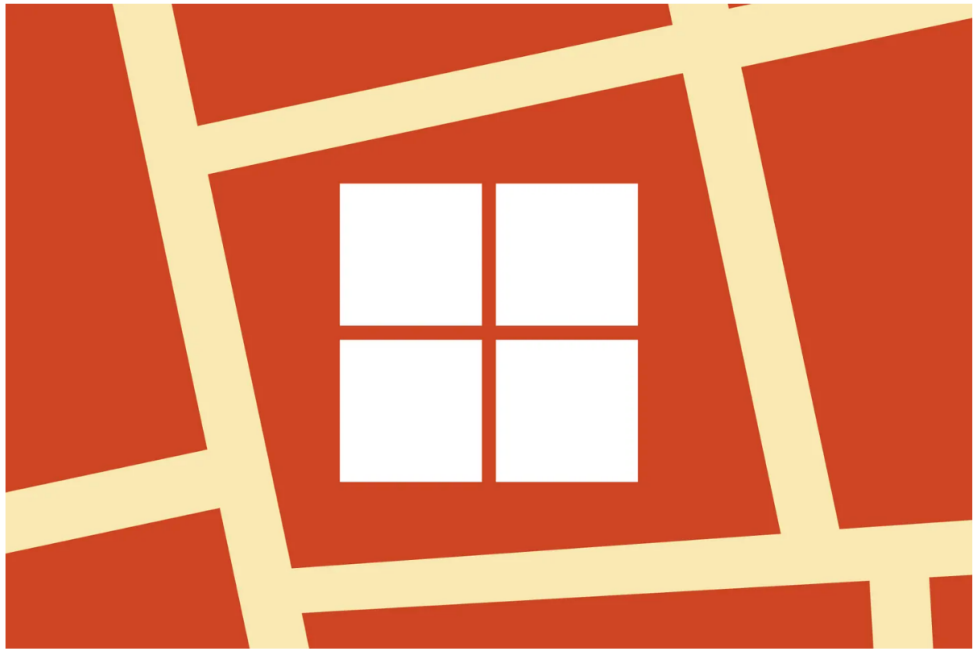


Illustration by Alex Castro / The Verge

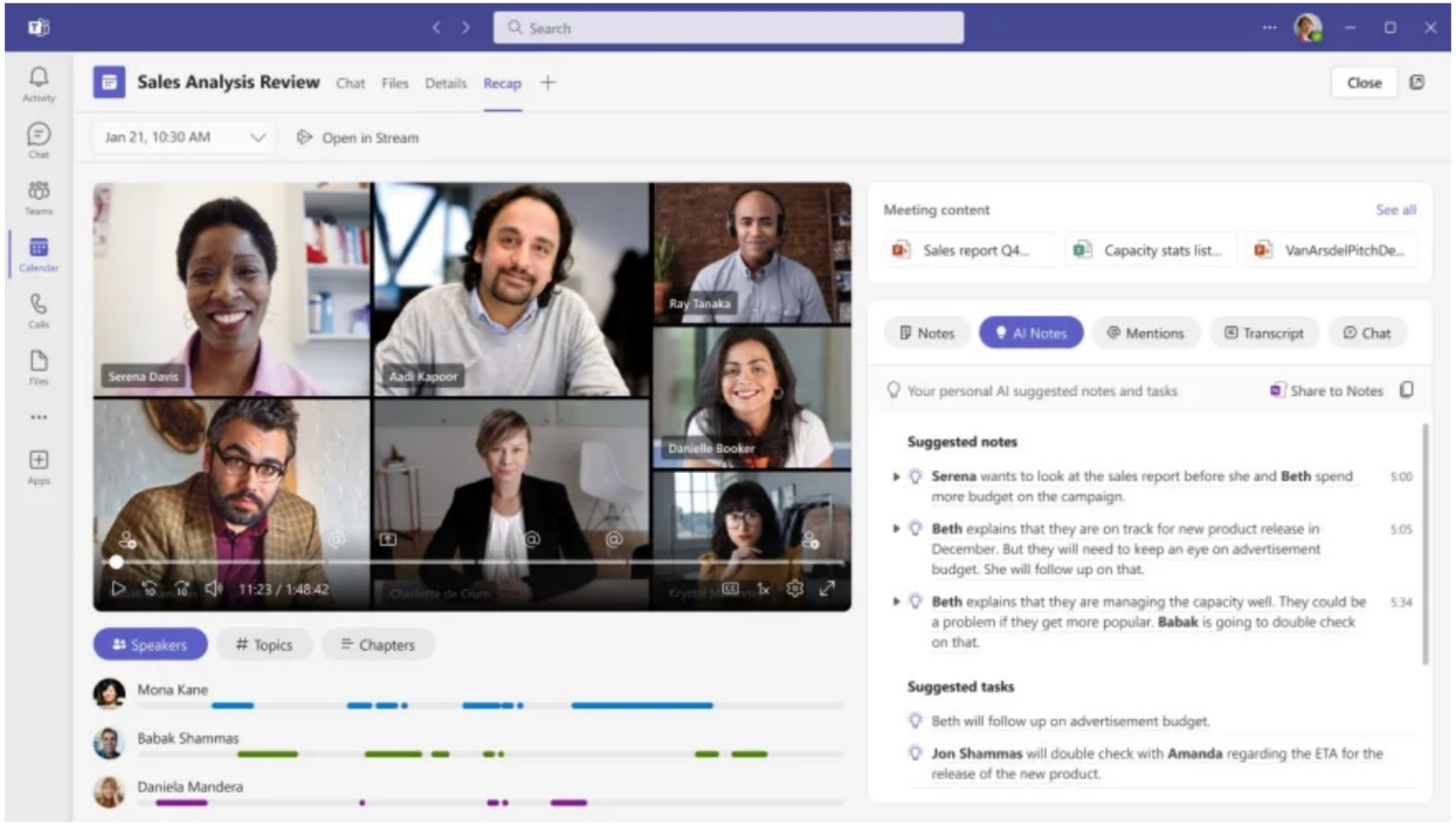
/ CEO Satya Nadella wants the software giant to push hard on AI, so Microsoft is gearing up for a year of AI announcements.

By TOM WARREN / @tomwarren

Feb 10, 2023, 7:02 AM EST | 18 Comments / 18 New

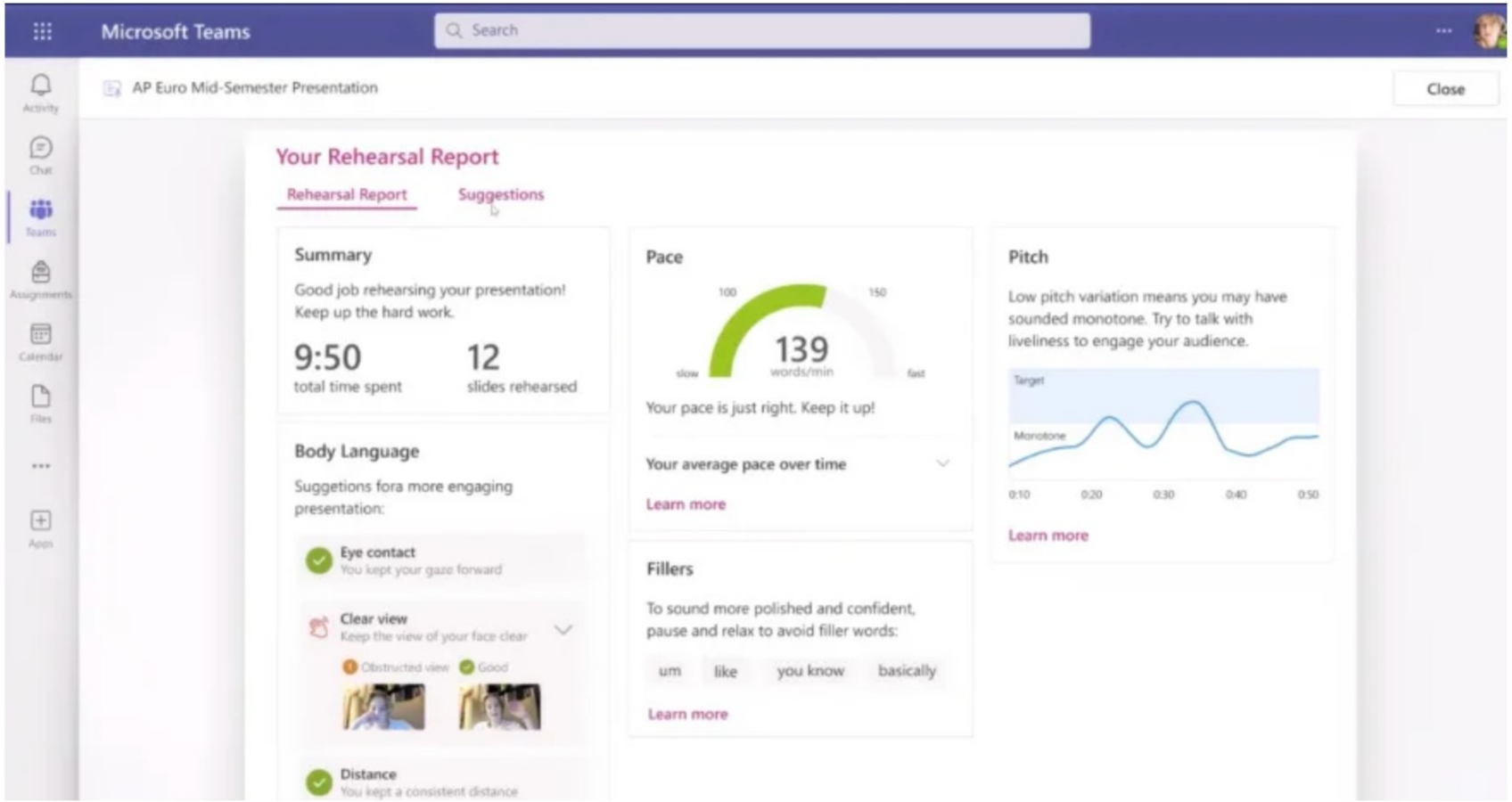
TEAMS PREMIUM

- Available Now
- AI-generated chapters in PowerPoint Live
- Live translations in captions
- Automatic meeting notes

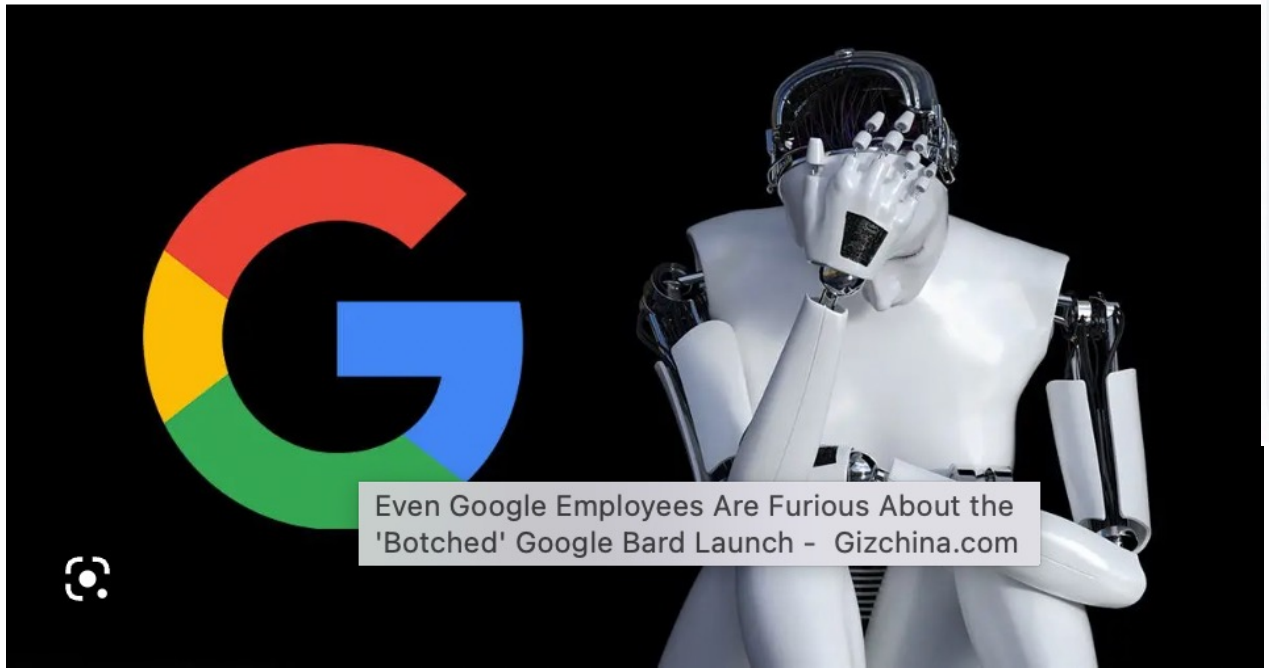


TEAMS FOR EDUCATION

- Launching for 2023-2024
- "Learning Accelerators"
- Speaker Progress – companion for Speaker Coach
- Math Coach and Math Progress



Microsoft



What new discoveries from the James Space Webb Telescope can I tell my 9 year old about?

Your 9-year old might like these recent discoveries made by The James Webb Space Telescope (JWST):

- **In 2023, The JWST discovered a number of galaxies nicknamed "green peas."** They were given this name because they are small and round, like peas.
- **The telescope captured images of galaxies that are over 13 billion years old.** This means that the light from these galaxies has been traveling for over 13 billion years to reach us.
- **JWST took the very first pictures of a planet outside of our own solar system.** These distant worlds are called "exoplanets". Exo means "from outside".

These discoveries can spark a child's imagination about the infinite wonders of the universe

Grant Tremblay
@astrogrant · **Follow**

Not to be a ~well, actually~ jerk, and I'm sure Bard will be impressive, but for the record: JWST did not take "the very first image of a planet outside our solar system".

the first image was instead done by Chauvin et al. (2004) with the VLT/NACO using adaptive optics.

BARD (AND ITS POTENTIAL....)

Andrej Karpathy
@karpathy
The hottest new programming language is English
3:14 PM · Jan 24, 2023 · 1.9M Views
2,084 Retweets
298 Quote Tweets
18K Likes

ARTIFICIAL INTELLIGENCE – GENERATIVE ART

Creates human-like artwork similar to how GPT creates coherent speech- artificial neural networks.

Mimics human creativity- using thousands of human-created pieces to create a specific style.

DALL-E

Name Dall-E- Salvador Dali x Wall-E

An Open-AI model which uses a modified version of GPT-3 to generate images

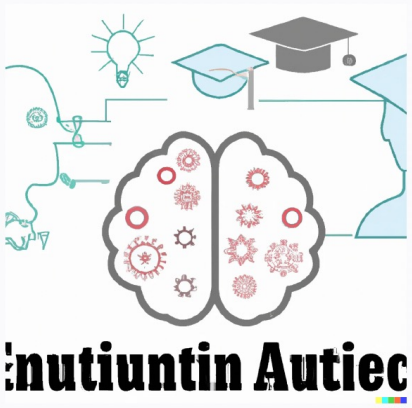
DALL·E History Collections

Edit the detailed description

Surprise me Upload

AI and education

Generate

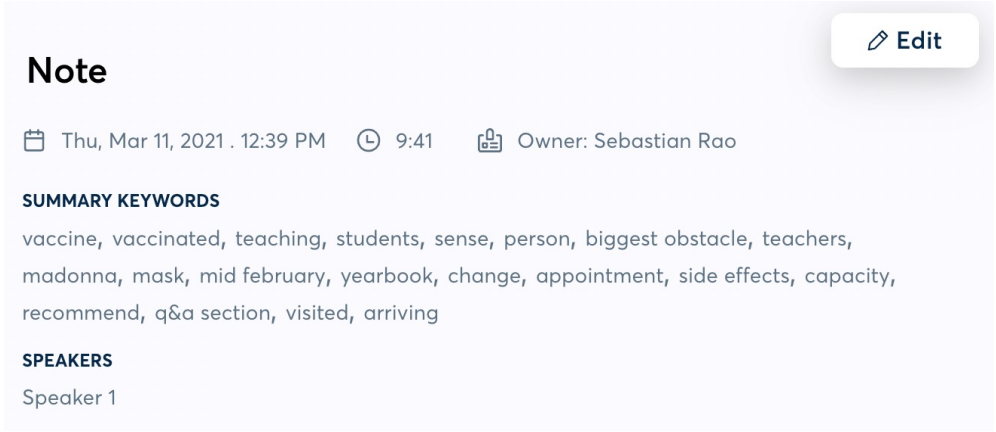


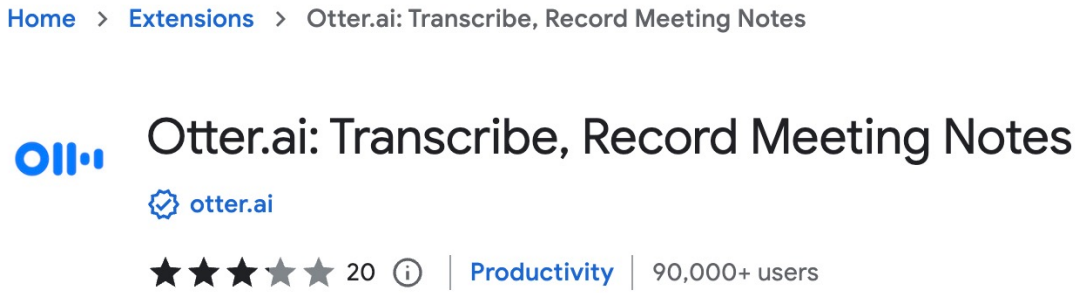
IMPLICATIONS FOR ART

- Copyright concerns, no protections for machines
- Theft of pre-existing art?
- Algorithmic bias in action?
- Mimicry, not real art

FOCUSED USE

OTTER AI



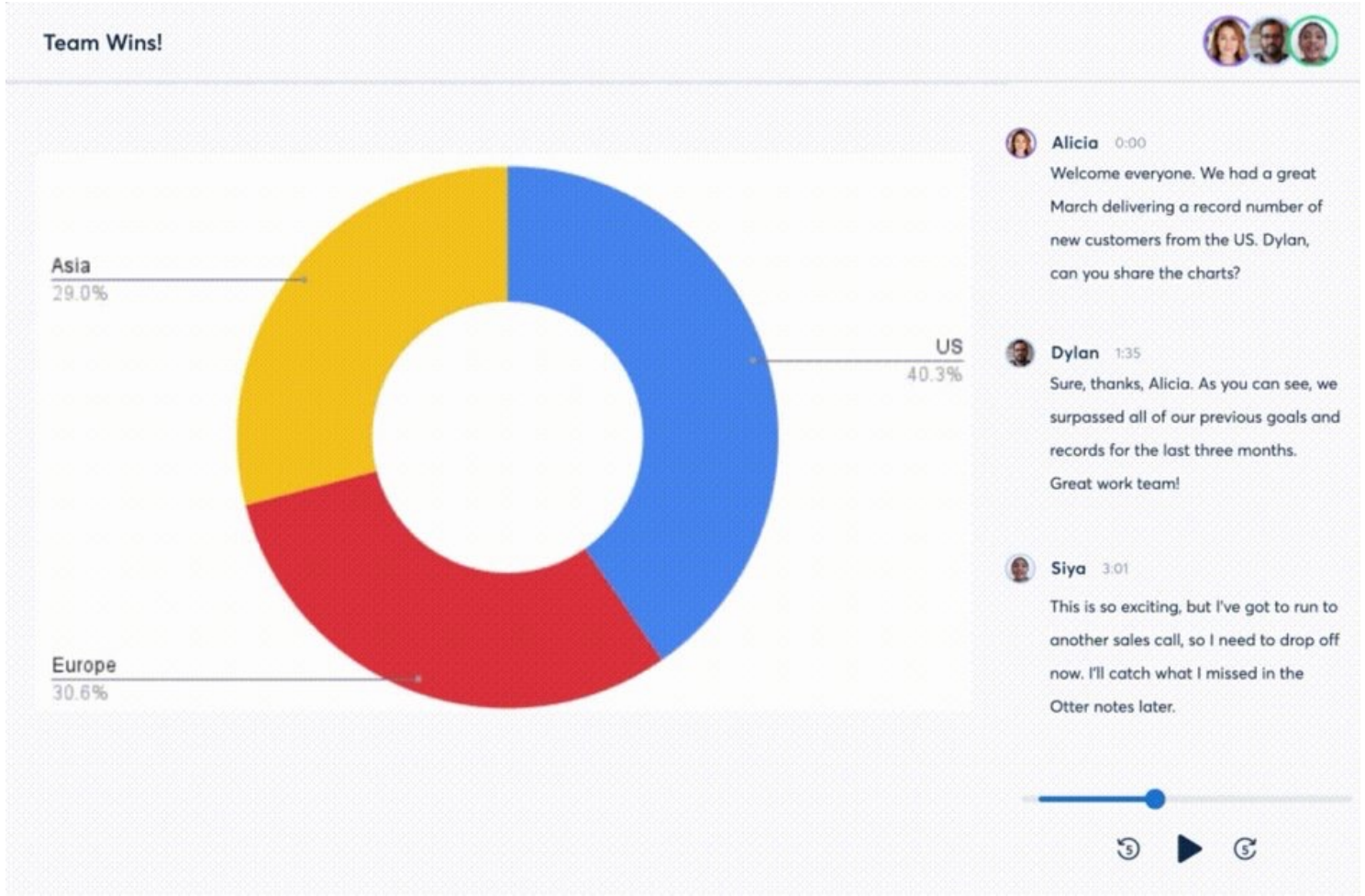


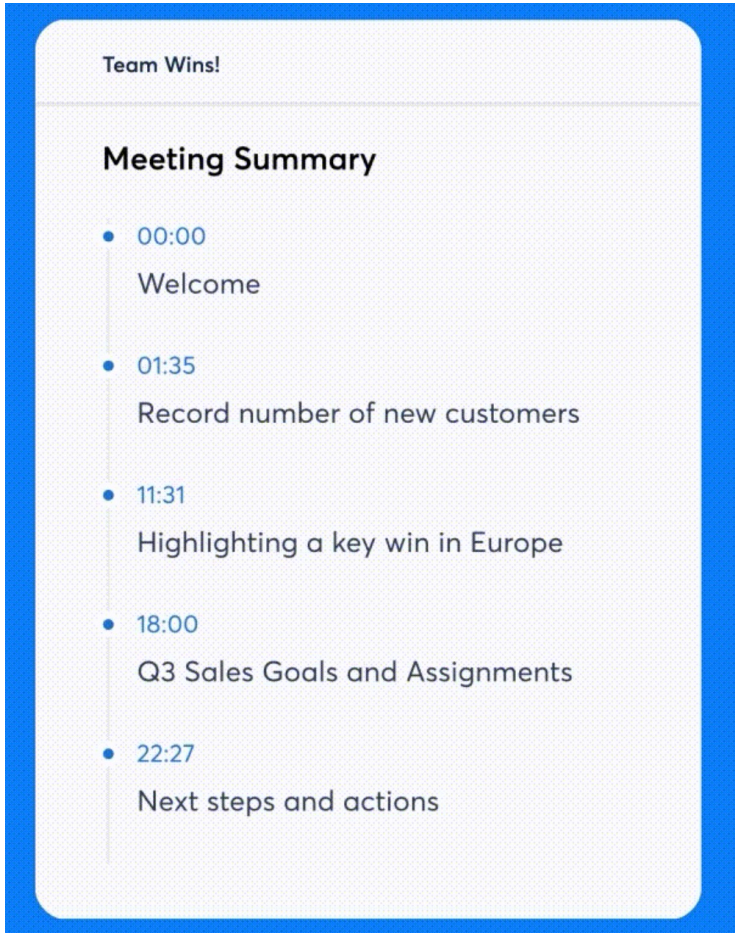
Get it Fast

Otter uses AI to convert hours of audio and video recordings to text in minutes

1. Otter transcribes audio, including meetings in real time
2. OtterPilot with AI adds capture of visuals, including slides, providing expansive meeting notes

DebateUS!


Team Wins!
Asia
29.0%
US
40.3%
Europe
30.6%
Alicia 0:00
Welcome everyone. We had a great March delivering a record number of new customers from the US. Dylan, can you share the charts?
Dylan 1:35
Sure, thanks, Alicia. As you can see, we surpassed all of our previous goals and records for the last three months. Great work team!
Siya 3:01
This is so exciting, but I've got to run to another sales call, so I need to drop off now. I'll catch what I missed in the Otter notes later.


Team Wins!
Meeting Summary
00:00
Welcome
01:35
Record number of new customers
11:31
Highlighting a key win in Europe
18:00
Q3 Sales Goals and Assignments
22:27
Next steps and actions

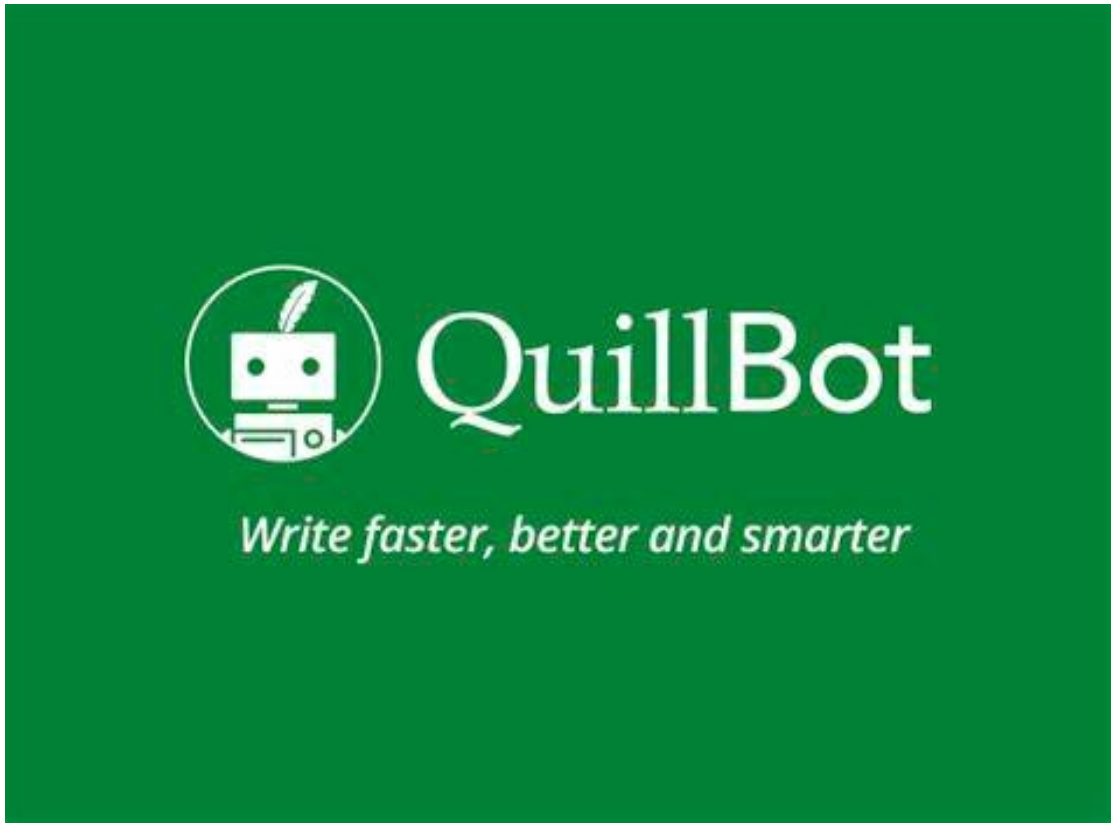
Perplexity.ai

1. LLM product for search
2. Similar to Bing Chat
3. Included search results seem to be reliable
4. Responsive to formatting and follow-up queries

Caktus.ai

- Intended for educators to rethink the classroom experience
- Personalize lessons for students
- Can be used by students, as well
- Caktus AI Writer
- Text summarizer
- Math & science tools
- Cover letters and resumes

QuillBot



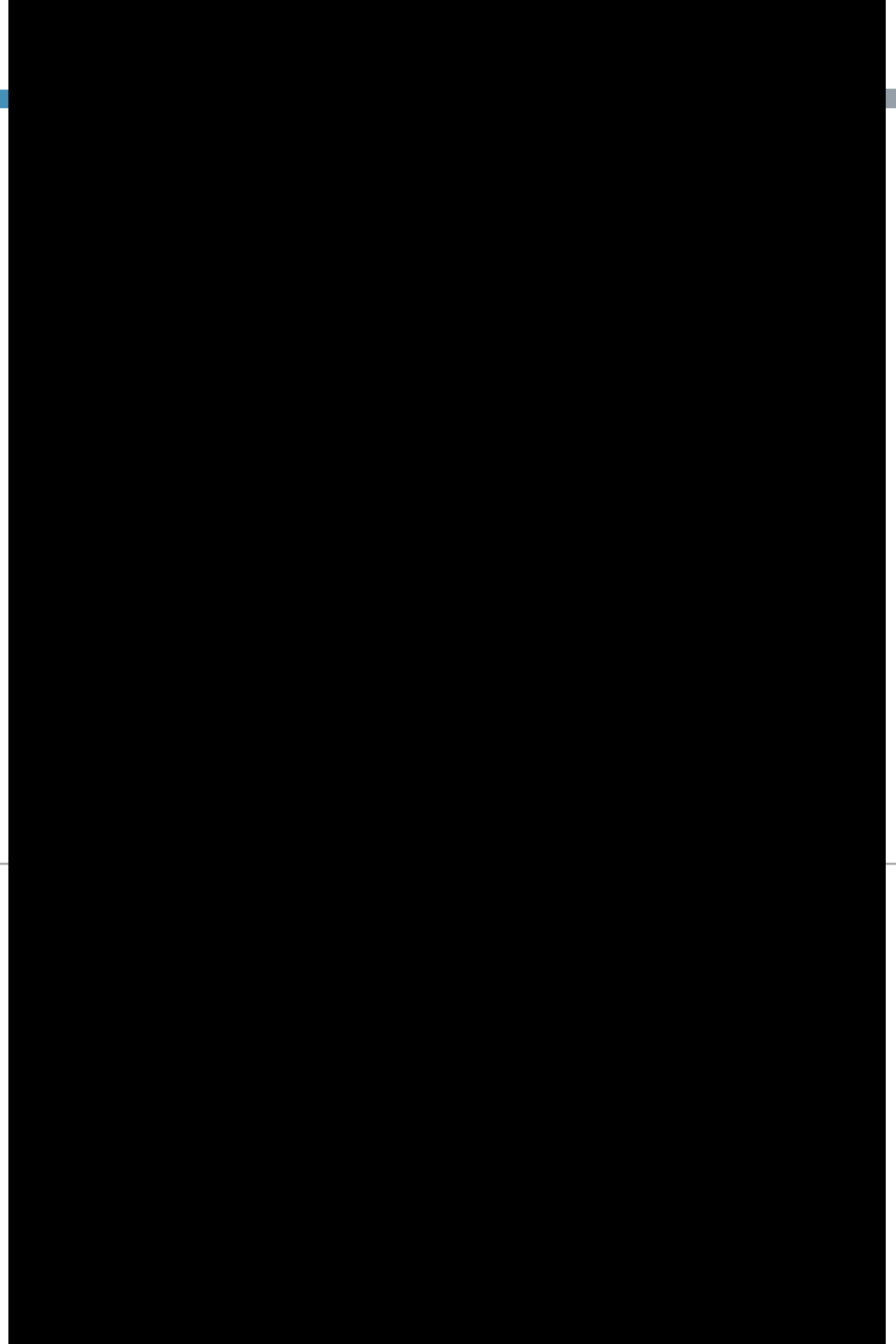
1. AI writing tool to paraphrase, summarize, and check grammar and spelling

AutoGPT

THE PERIL OF GAI

DEEP FAKES

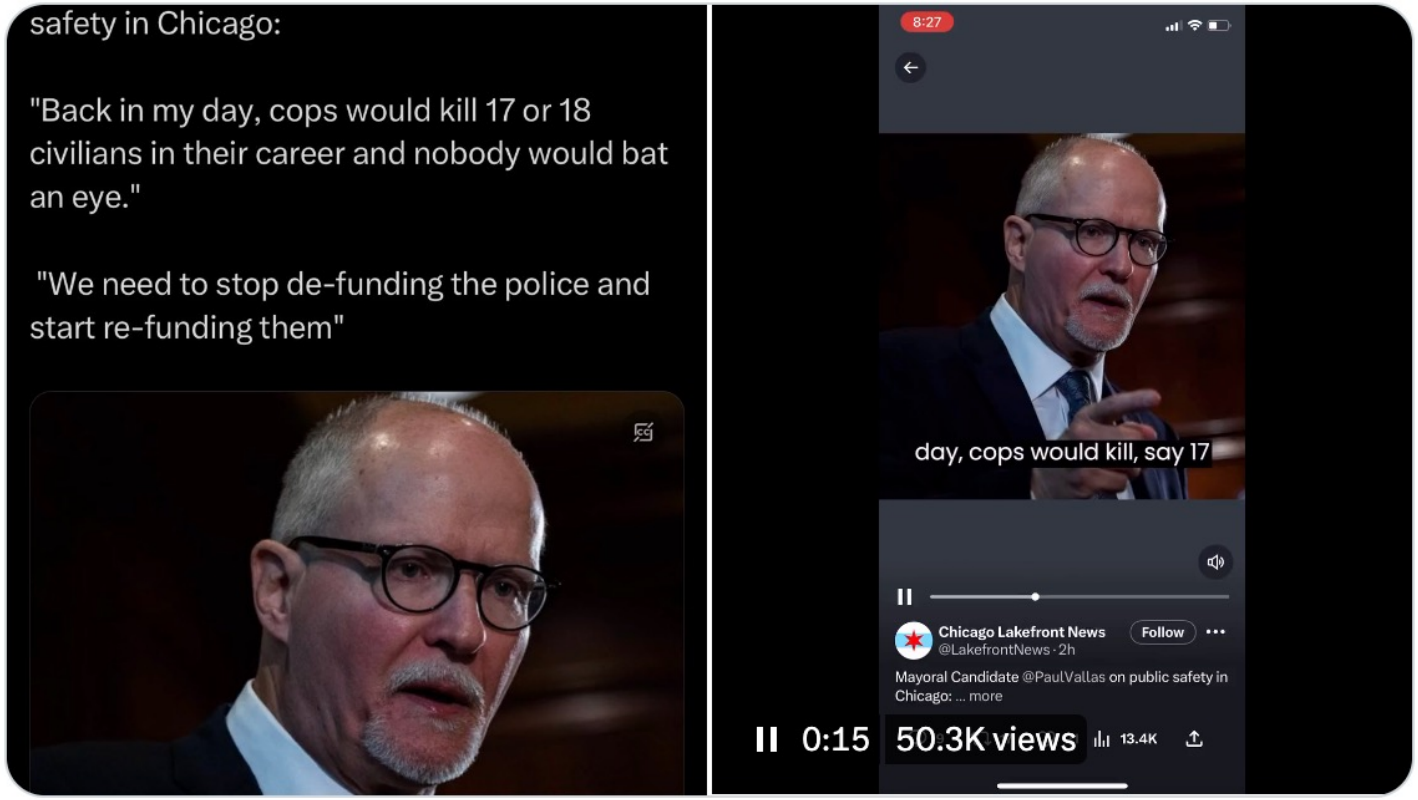
What is real?



Jake Lewis
@jake___lewis

First time I've seen this - Twitter account pops up, tweets a video of a political candidate (Paul Vallas) saying something with what seems like a fake, AI generated voice

The fake was sniffed out quickly in the replies, and then the account + tweet were promptly deleted



9:47 PM · Feb 26, 2023 · **181.6K** Views

Cornell University

the Sim

arXiv > cs > arXiv:2304.13023

Search...

Help | Adva

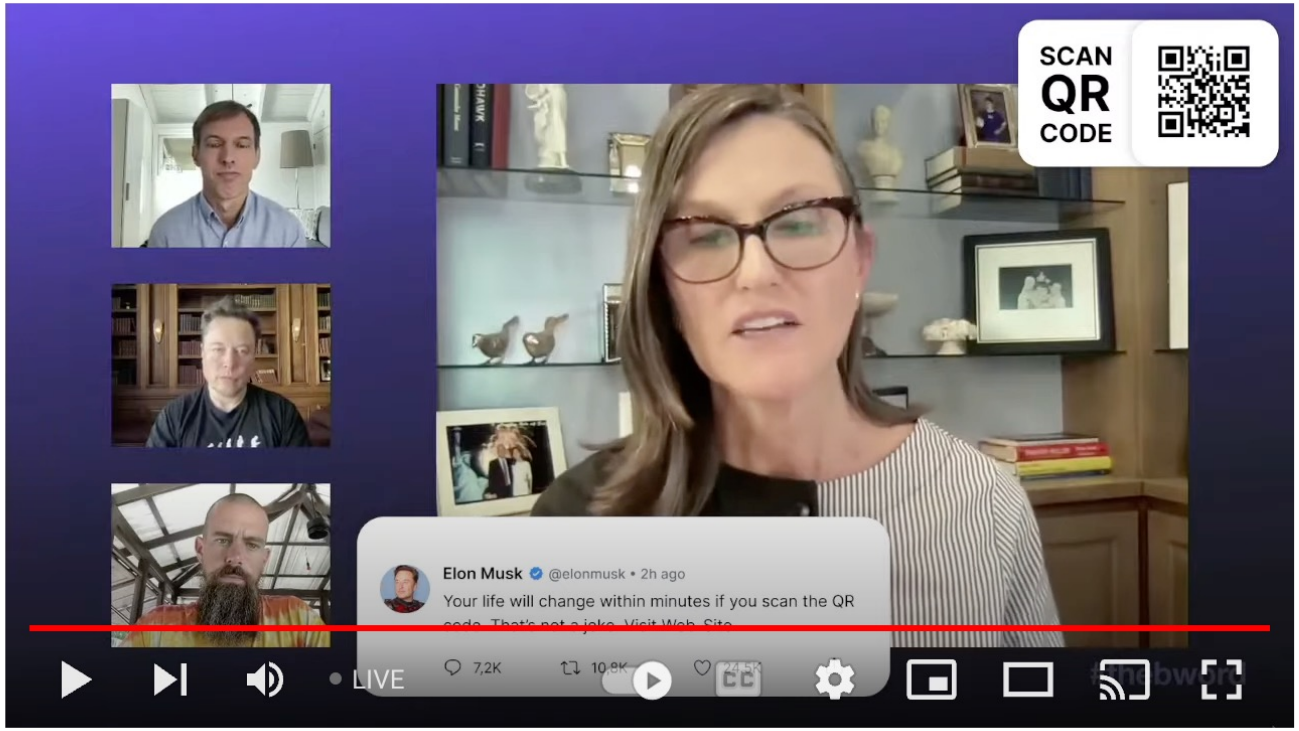
Computer Science > Artificial Intelligence

[Submitted on 25 Apr 2023]

Seeing is not always believing: A Quantitative Study on Human Perception of AI-Generated Images

Zeyu Lu, Di Huang, Lei Bai, Xihui Liu, Jingjing Qu, Wanli Ouyang

Photos serve as a way for humans to record what they experience in their daily lives, and they are often regarded as trustworthy sources of information. However, there is a growing concern that the advancement of artificial intelligence (AI) technology may produce fake photos, which can create confusion and diminish trust in photographs. This study aims to answer the question of whether the current state-of-the-art AI-based visual content generation models can consistently deceive human eyes and convey false information. By conducting a high-quality quantitative study with fifty participants, we reveal, for the first time, that humans cannot distinguish between real photos and AI-created fake photos to a significant degree 38.7%. Our study also finds that an individual's background, such as their gender, age, and experience with AI-generated content (AIGC), does not significantly affect their ability to distinguish AI-generated images from real photographs. However, we do observe that there tend to be certain defects in AI-generated images that serve as cues for people to distinguish between real and fake photos. We hope that our study can raise awareness of the potential risks of AI-generated images and encourage further research to prevent the spread of false information. From a positive perspective, AI-generated images have the potential to revolutionize various industries and create a better future for humanity if they are used and regulated properly.



The Future of AI is Here: What can you do with GPT-4? - LIVE with OpenAI & Elon Musk

Open AI
5.55K subscribers

Subscribe

1.8K | Share

1,048 watching now Started streaming 2 hours ago #ChatGPT #OpenAI #AI
Unlocking the Power of AI: Everything You Need to Know About OpenAI and ChatGPT - The Revolutionary Chatbot Changing the Game!"

In this video, we dive deep into the world of AI with OpenAI and their game-changing ChatGPT. From the OpenAI Playground to OpenAI Whisper, we cover everything you need to know about the technology behind this impressive chatbot. Learn how to use ChatGPT with our comprehensive tutorial and explore the capabilities of this incredible machine learning system.

Screenshot

Discover the differences between ChatGPT and GPT-4 and stay up-to-date with the latest news and

Top chat

messages

Open AI Join the cryptocurrency event now!

Open AI Double (2X) your #BTC #ETH in partnership with Elon Musk

Open AI For example:

Open AI Send 1+ ETH, get 2+ ETH

Open AI Send 0.1+ BTC, get 0.2+ BTC

Open AI More info: https://future-promo.com

Open AI Over 720 BTC & 5,800 ETH have already been sent to live stream viewers.

Subscribers-only mode. Messages that appear are from people who've subscribed to this channe[illegible]5 years or longer.

Subscribers-only mode

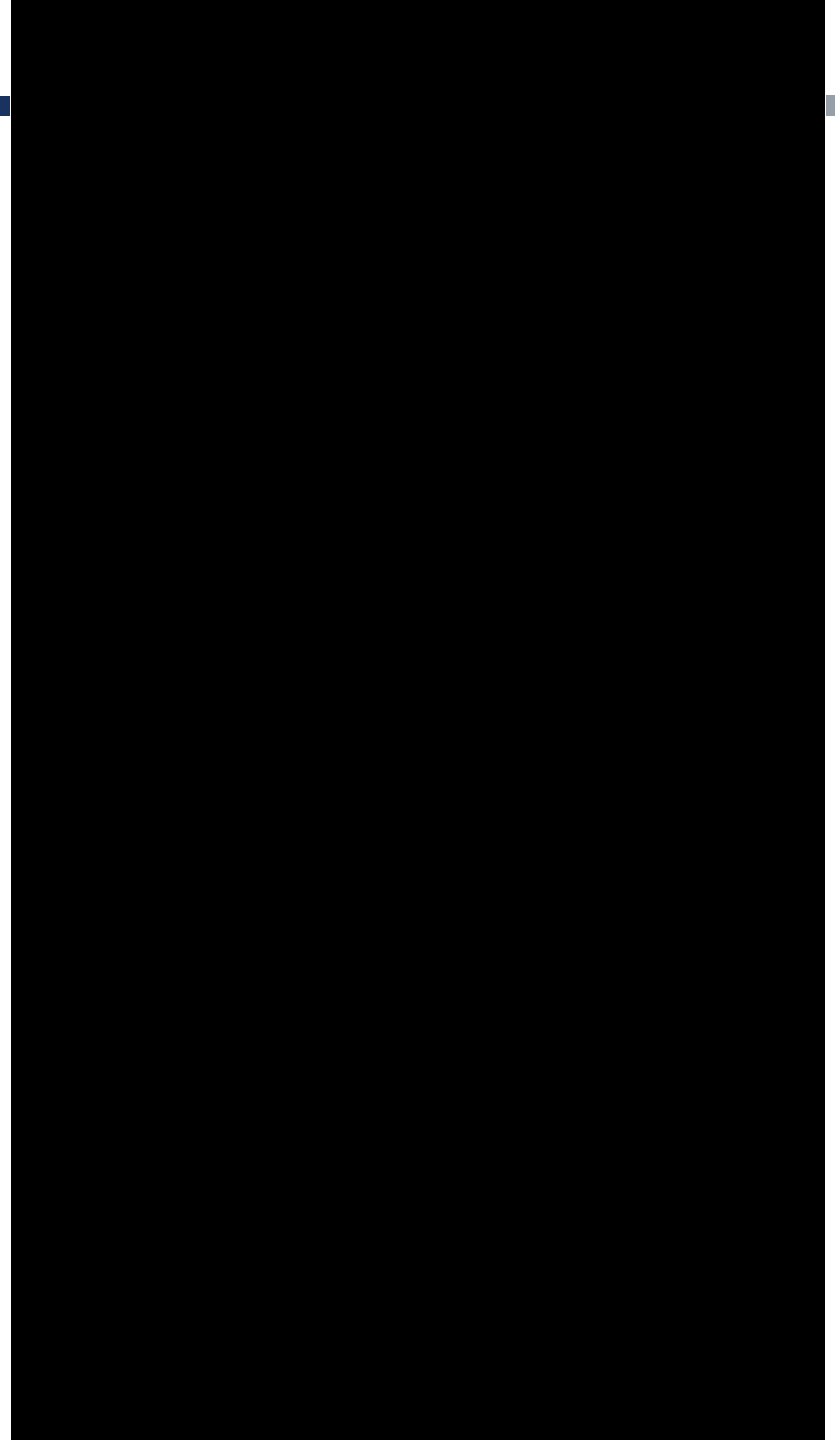
Hide chat

All | From Open AI | AI | Elon

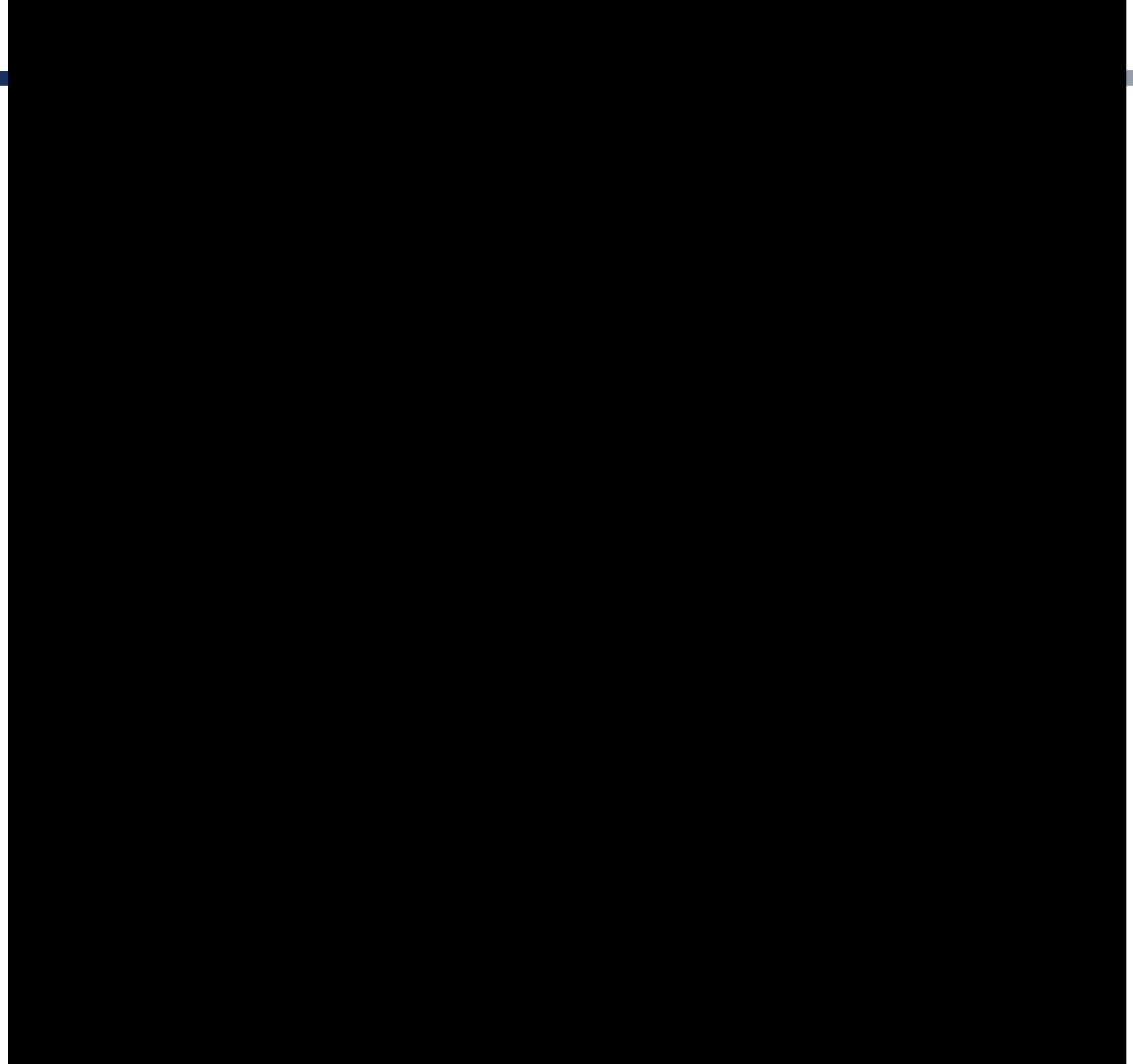
Max Tegmark:

GhostWriter977

Drake and the Weeknd



The Presidents have a heart to heart at 3am while gaming



IT'S WHAT WE DON'T KNOW…

AI 'godfather' Geoffrey Hinton warns of dangers as he quits Google

1 day ago · Comments

Watch: AI 'godfather' Geoffrey Hinton tells the BBC of AI dangers as he quits Google

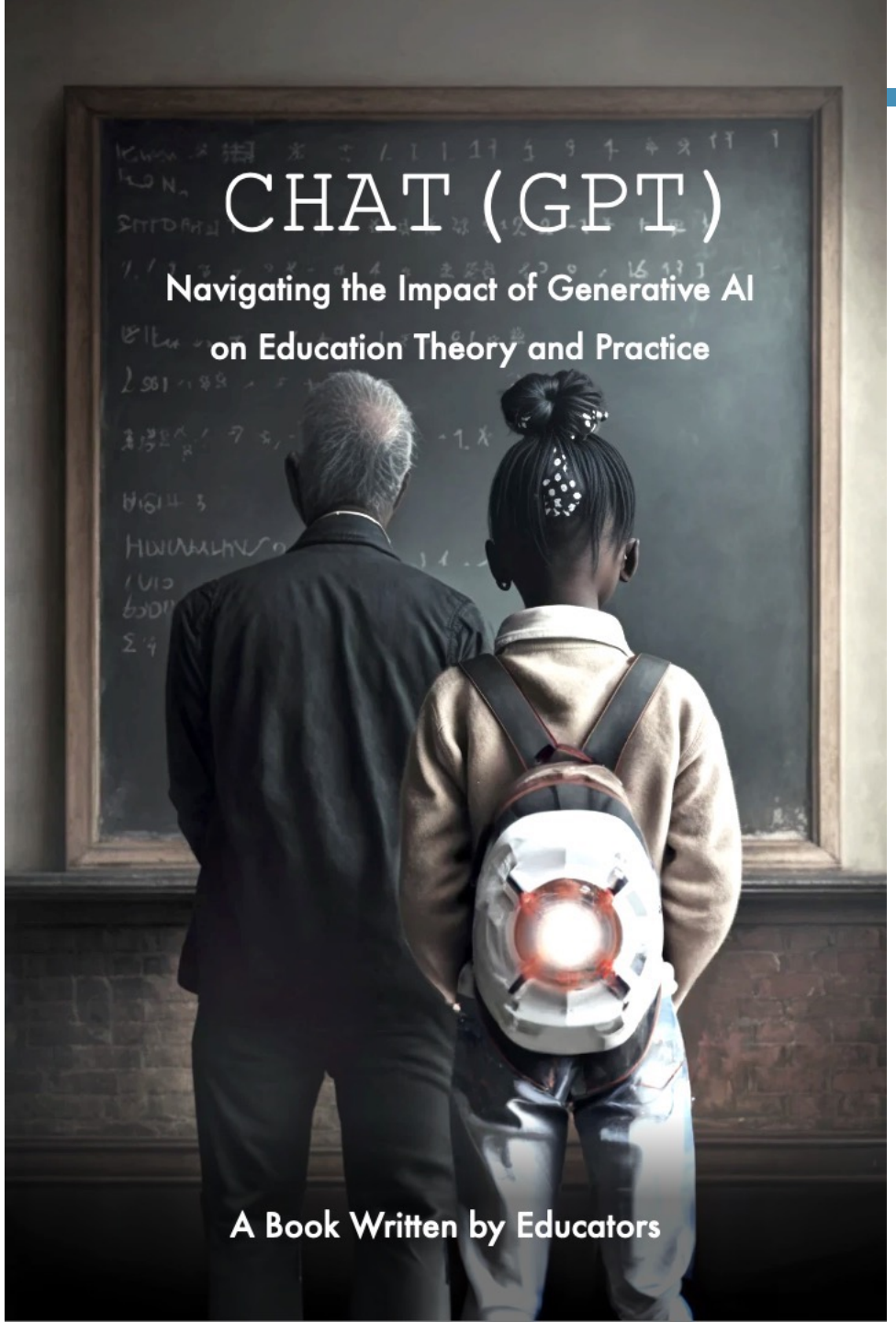
FAST COMPANY

05-02-23 | 5:00 AM

Humans should fear AI—but not for the reasons we can imagine

Risk projections can't see around the corners of technology. So how does humanity design a world for dangers that are unknown?

[Source Image: Antonio M. Rosario/Getty Images]



Chat(GPT): Navigating the Impact of Generative AI on Education Theory and Practice

Published on March 27, 2023

Amazon Kindle and Print

Anand Rao
arao@umw.edu