WIRED

WILL KNIGHT   **BUSINESS**   APR 17, 2023 7:00 AM

OpenAI's CEO Says the Age of Giant AI Models Is Already Over

Sam Altman says the research strategy that birthed ChatGPT is played out and future strides in artificial intelligence will require new ideas.

We Care About Your Privacy

We, and our **225** partners use cookies and simil
remember their preferences. We may also use th
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store an
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

ACC

REJ

YOUR PRIVA

PHOTOGRAPH: JASON REDMOND/GETTY IMAGES

...but is played out. It's unclear exactly where...

OpenAI has delivered a series of impressive...
language in recent years by taking existing...
scaling them up to previously unimagined s...
was likely trained using trillions of words of...
computer chips. The process cost over $100...

We Care About Your Privacy

We, and our　　　partners use cookies and simil...
remember their preferences. We may also use th...
of advertising campaigns, target advertisements...
technologies are essential for ensuring the prop...
cannot be disabled, while others are optional bu...
various ways.

We, in collaboration with our partners, store an...
process your personal data, such as browsing da...
advertising and content, advertising and conten...
services development including by using precis...
through active device scanning. You have the o...
your preferences at any time by selecting the 'Y...
website footer. To review or object to instances...
interest in utilizing your data, please visit our v...
only on this website.

But the company's CEO, Sam Altman, says further progress will not come from making models bigger. "I think we're at the end of the era where it's going to be these, like, giant, giant models," he told an audience at an event held at MIT late last week. "We'll make them better in other ways."

We Care About Your Privacy

We, and our   partners use cookies and simil
remember their preferences. We may also use tl
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store an
process your personal data, such as browsing d;
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

SIGN U

By signing up, you agree to our user agreement (including clas
acknowledge our privacy policy.

Meanwhile, numerous well-funded startups
and Character.AI, are throwing enormous re
algorithms in an effort to catch up with Ope
ChatGPT was based on a slightly upgraded
also access a version powered by the more

Altman's statement suggests that GPT-4 cou
emerge from OpenAI's strategy of making tl
more data. He did not say what kind of rese
take its place. In the paper describing GPT-4
diminishing returns on scaling up model siz
limits to how many data centers the compar
build them.

Nick Frosst, a cofounder at Cohere who pre
Altman's feeling that going bigger will not work indefinitely rings true. He, too,
believes that progress on transformers, the type of machine learning model at the
heart of GPT-4 and its rivals, lies beyond scaling. "There are lots of ways of
making transformers way, way better and more useful, and lots of them don't
involve adding parameters to the model," he says. Frosst says that new AI model

text.

The first of these language models, GPT-2,
form, it had 1.5 billion parameters, a measu
connections between its crude artificial neu

At the time, that was extremely large compa
part to OpenAI researchers finding that scal
coherent. And the company made GPT-2's s
still bigger, with a whopping 175 billion para
to generate poems, emails, and other text h
research institutions to push their own AI m

After ChatGPT debuted in November, mem
that GPT-4, when it arrived, would be a moc
complexity. Yet when OpenAI finally annou
model, the company didn't disclose how big
longer all that matters. At the MIT event, Alt
$100 million; he replied, "It's more than tha

We Care About Your Privacy

We, and our   partners use cookies and simil
remember their preferences. We may also use tl
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store an
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

Although OpenAI is keeping GPT-4's size and inner workings secret, it is likely
that some of its intelligence already comes from looking beyond just scale. On
possibility is that it used a method called reinforcement learning with human
feedback, which was used to enhance ChatGPT. It involves having humans judge

You Might Also Like

- **In your inbox**: WIRED's <u>most ambitio</u>
- Does the <u>"war on protein"</u> exist?
- **Big Story**: China's <u>renewable energy r</u>
- The race to build <u>the DeepSeek of Eur</u>
- **Watch our livestream replay**: <u>Welcor</u>

We Care About Your Privacy

We, and our   partners use cookies and simil
remember their preferences. We may also use th
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store an
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

<u>Will Knight</u> is a senior writer for WIRED, covering ar
<u>newsletter</u>, a weekly dispatch from beyond the cutti
previously a senior editor at MIT Technology Review
advances in AI and China's AI ... <u>Read More</u>

SENIOR WRITER 𝕏

TOPICS   ARTIFICIAL INTELLIGENCE   NEURAL NETWORKS   DEEP LEARNING   MACHINE LEARNING

CHATGPT   OPENAI   GOOGLE   CHATBOTS

By signing up, you agree to our user agreement (including cla
acknowledge our privacy policy.

READ MO

We Care About Your Privacy

We, and our   partners use cookies and simil
remember their preferences. We may also use th
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store and
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

Why Are Grok and X Still Available in App Stores?

Elon Musk's chatbot has been used to generate thousands of sexualized images of adults and
apparent minors. Apple and Google have removed other "nudify" apps—but continue to host X

How AI Companies Got Caught Up in US

Two years ago, companies like Meta and OpenAI we
Now all of that has changed.

NICK SRNICEK

We Care About Your Privacy

We, and our ⠀⠀⠀⠀ partners use cookies and simil
remember their preferences. We may also use tl
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store an
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

Roblox's AI-Powered Age Verification Is a Complete Mess

SUBSCRIBE

Inside OpenAI's Raid on Thinking Machin

OpenAI is planning to bring over more researchers f
two cofounders, a source familiar with the situation
with AI.

MAXWELL ZEFF

We Care About Your Privacy

We, and our   partners use cookies and simil
remember their preferences. We may also use tl
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store an
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

AI Devices Are Coming. Will Your Favorit

Tech companies are calling AI the next platform. Bu
agents stand between them and their users.

MAXWELL ZEFF

We Care About Your Privacy

We, and our   partners use cookies and simil
remember their preferences. We may also use tl
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store an
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

People Are Using AI to Falsely Identify the Good

Online detectives are inaccurately claiming to have killed a 37-year-old woman in Minnesota based on

DAVID GILBERT

We Care About Your Privacy

We, and our   partners use cookies and simil remember their preferences. We may also use th of advertising campaigns, target advertisements technologies are essential for ensuring the prop cannot be disabled, while others are optional bu various ways.

We, in collaboration with our partners, store an process your personal data, such as browsing da advertising and content, advertising and conten services development including by using precis through active device scanning. You have the o your preferences at any time by selecting the 'Y website footer. To review or object to instances interest in utilizing your data, please visit our v only on this website.

Grok Is Generating Sexual Content Far More Graphic Than What's on X

A WIRED review of outputs hosted on Grok's official website shows it's being used to create violent sexual images and videos, as well as content that includes apparent minors.

AI-Powered Dating Is All Hype. IRL Cruisi

Dating apps and AI companies have been touting bo
just be good old-fashioned meet-cutes.

JASON PARHAM

We Care About Your Privacy

We, and our   partners use cookies and simil
remember their preferences. We may also use th
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store and
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

Google Gemini Is Taking Control of Humanoid Robots on Auto Factory Floors

Jensen Huang Says Nvidia's New Vera Ru[...]

The chip giant says Vera Rubin will sharply cut the [...] strengthening the appeal of its integrated computin[...]

LAUREN GOODE

We Care About Your Privacy

We, and our   partners use cookies and simil[...] remember their preferences. We may also use t[...] of advertising campaigns, target advertisements[...] technologies are essential for ensuring the prop[...] cannot be disabled, while others are optional bu[...] various ways.

We, in collaboration with our partners, store an[...] process your personal data, such as browsing da[...] advertising and content, advertising and conten[...] services development including by using precis[...] through active device scanning. You have the o[...] your preferences at any time by selecting the 'Y[...] website footer. To review or object to instances[...] interest in utilizing your data, please visit our v[...] only on this website.

Ads Are Coming to ChatGPT. Here's How They'll Work

SUBSCRIBE

We Care About Your Privacy

We, and our   partners use cookies and simil
remember their preferences. We may also use tl
of advertising campaigns, target advertisements
technologies are essential for ensuring the prop
cannot be disabled, while others are optional bu
various ways.

We, in collaboration with our partners, store an
process your personal data, such as browsing da
advertising and content, advertising and conten
services development including by using precis
through active device scanning. You have the o
your preferences at any time by selecting the 'Y
website footer. To review or object to instances
interest in utilizing your data, please visit our v
only on this website.

YOUR PRIVAC