

Title: GPT-4.5

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Categories: Category:2025 in artificial intelligence, Category:2025 software, Category:ChatGPT, Category:Generative pre-trained transformers, Category:Large language models

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GPT-4.5 (codenamed " Orion ") [ 2 ] is a large language model developed by OpenAI as part of the GPT series. Officially released on February 27, 2025, GPT-4.5 is available to users subscribed to the ChatGPT Plus and Pro plans across web, mobile, and desktop platforms. [ 3 ] Access was also provided through the OpenAI API and Developer Playground until July 14, 2025. [ 4 ] [ 5 ] [ 6 ] On August 7, 2025, with the release of GPT-5 , GPT-4.5 was removed from both the ChatGPT website and the API for all paid user tiers, as part of a broader retirement of older models. [ 7 ]

#### Overview

GPT-4.5 was primarily trained using unsupervised learning , which improves its ability to recognize patterns, draw connections, and generate creative insights without reasoning. This method was combined with supervised fine-tuning and reinforcement learning from human feedback . The computational resources needed for training were provided by Microsoft Azure . [ 4 ]

Sam Altman described GPT-4.5 as a "giant, expensive model". [ 8 ] [ 9 ] As of February 2025, through OpenAI's API it costs \$75 per million input tokens and \$150 per million output tokens, whereas GPT-4o only costs \$2.50 per million input tokens and \$10 per million output tokens. [ 10 ]

The model was tested on the MMLU test set, which tested 15 different languages, namely Arabic , Bengali , Chinese , English , French , German , Hindi , Indonesian , Italian , Japanese , Korean , Portuguese , Spanish , Swahili , and Yoruba , with the model outperforming GPT-4o on all of them. [ 1 ] A pre-print study in March 2025 found that GPT-4.5 passed the Turing test . [ 11 ]

In April 2025, OpenAI announced that it was phasing out GPT-4.5 from API access in favor of GPT-4.1 , set to take effect on July 14. [ 5 ]

#### Reception

GPT-4.5 was mostly seen by reviewers as an incremental upgrade over GPT-4o . Cade Metz, writing for The New York Times , stated that the model "signifies the end of an era" as it is their last chatbot to not do chain of thought reasoning . The Times also said it was "unlikely to generate as much excitement as GPT-4". [ 12 ] Eric Schwartz from TechRadar praised its ability to understand subtext and respond to questions in a more humanlike manner compared to GPT-4o, but concluded that "it doesn't feel like an enormous leap" from the prior model. [ 13 ] Aaron Levie , the CEO of cloud services company Box , told Axios that GPT-4.5 is "about 20% better" than GPT-4o on specific tasks, such as information extraction in large datasets. [ 14 ]

See also

List of large language models

References

External links

Official website

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in education

GPT Store

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ChatGPT Deep Research

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Sam Altman removal

removal

Greg Brockman

Sarah Friar

Jakub Pachocki

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Mira Murati

Emmett Shear

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Fidji Simo  
Lawrence Summers  
Bret Taylor (chair)  
Greg Brockman (2017–2023)  
Reid Hoffman (2019–2023)  
Will Hurd (2021–2023)  
Holden Karnofsky (2017–2021)  
Elon Musk (2015–2018)  
Ilya Sutskever (2017–2023)  
Helen Toner (2021–2023)  
Shivon Zilis (2019–2023)  
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Gradient descent SGD Quasi-Newton method Conjugate gradient method

SGD

Quasi-Newton method

Conjugate gradient method

Backpropagation

Attention

Convolution

Normalization Batchnorm

Batchnorm

Activation Softmax Sigmoid Rectifier

Softmax

Sigmoid

Rectifier

Gating

Weight initialization

Regularization

Datasets Augmentation

Augmentation

Prompt engineering

Reinforcement learning Q-learning SARSA Imitation Policy gradient

Q-learning

SARSA

Imitation

Policy gradient

Diffusion

Latent diffusion model

Autoregression

Adversary

RAG

Uncanny valley

RLHF

Self-supervised learning

Reflection

Recursive self-improvement

Hallucination

Word embedding

Vibe coding

Machine learning In-context learning

In-context learning

Artificial neural network Deep learning

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Large language model

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Whisper

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Aurora

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Text-to-video models Dream Machine Runway Gen Hailuo AI Kling Sora Veo

Dream Machine

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Claude

Gemini Gemini (language model) Gemma

Gemini (language model)

Gemma

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Gated recurrent unit (GRU)  
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Gemini

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o3

o4-mini

Qwen

Base44

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