

Using GitHub Copilot CHAT

OBJECTIVES

- **LLMs**
- **GitHub Copilot X**
 - **Copilot**
 - **CLI**
 - **Labs**
 - **Chat**
- **Warning**
- **Prompt Engineering**
- **Labs**



FORBES > INNOVATION > AI

ChatGPT Is The Fastest Growing App In The History Of Web Applications

Cindy Gordon Contributor 

*CEO, Innovation Leader Passionate about
Modernizing via AI*

Follow

Feb 2, 2023, 06:24pm EST



UBS research just confirmed that ChatGPT is the "fastest-growing consumer application in history," according to research from [UBS](#) research just



announced that ChatGPT. "In 20 years following the Internet space, we



cannot recall a faster ramp in a consumer internet app. By comparison, TikTok took nine months to reach 100 million monthly users, and Instagram about 2.5 years." Other popular online services have taken longer to hit the

one million user mark. Instagram being the the closest. Another comparison is when [Netflix](#) was launched as a subscription service in 1999, the one million user mark took over 3.5 years to reach this many users.

Already at over one million users in just five days since launching in

The background is a deep navy blue space scene. It is filled with numerous small, distant stars of varying brightness. Several brighter stars exhibit prominent four-pointed diffraction spikes. Faint, wispy nebulae in shades of blue and purple are scattered across the field of view, adding depth and texture to the cosmic setting.

LLMs

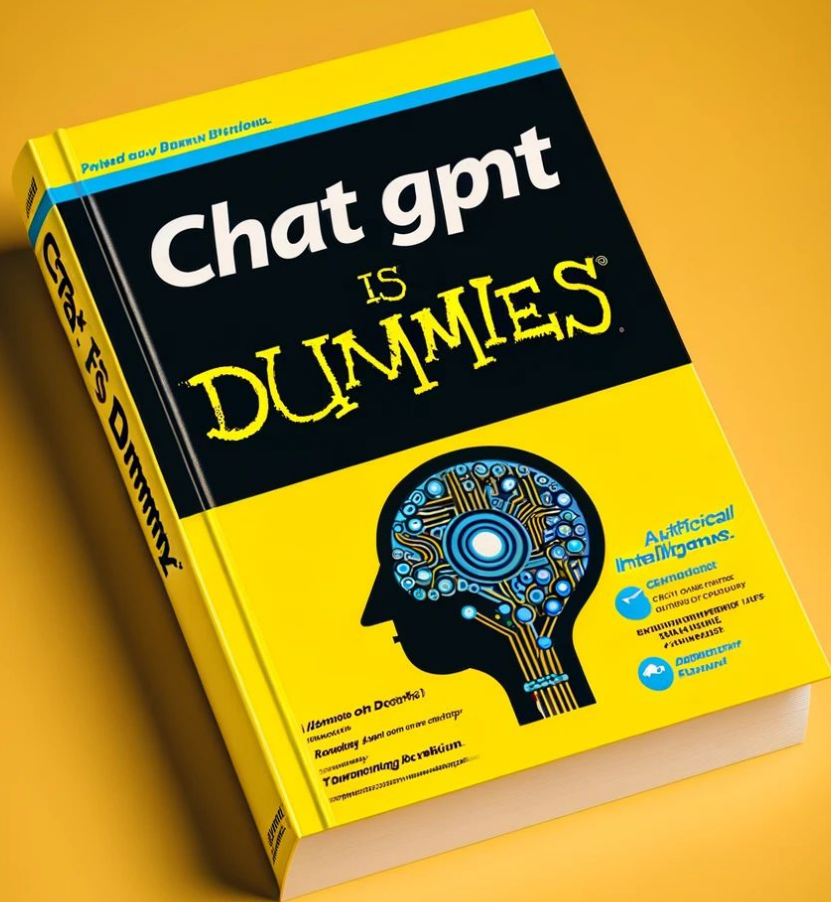


ChatGPT

Eloquent LIAR



ChatGPT



Jun **2020**
Jun **2021**
March **2023**
November **2023**
 2024

ChatGPT
GitHub Copilot
Google PaLM
GitHub Copilot Chat
Google Gemini

Beware LLMs

Auto-Regressive LLMs Suck !

- ▶ **Auto-Regressive LLMs are good for**
 - ▶ Writing assistance, first draft generation, stylistic polishing.
 - ▶ Code writing assistance
- ▶ **What they *not* good for:**
 - ▶ Producing factual and consistent answers (hallucinations!)
 - ▶ Taking into account recent information (anterior to the last training)
 - ▶ Behaving properly (they mimic behaviors from the training set)
 - ▶ Reasoning, planning, math
 - ▶ Using “tools”, such as search engines, calculators, database queries...
- ▶ **We are easily fooled by their fluency.**
- ▶ **But they don't know how the world works.**

Y. LeCun

▶ But they don't know how



<https://www.youtube.com/watch?v=pd0JmT6rYcl>

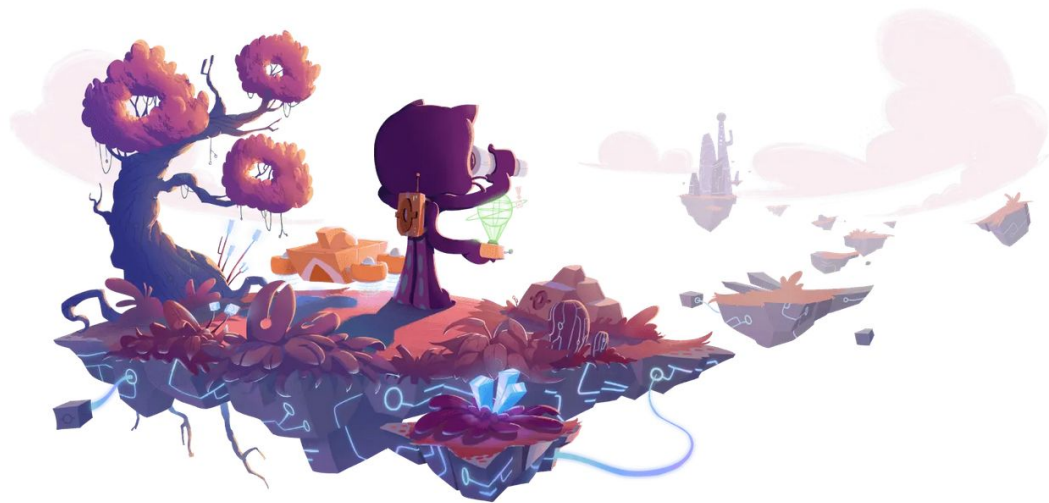


GitHub

🔍 path:**/dockerfile OR path:**/.dockerfile OR path:**/dockerfile.*



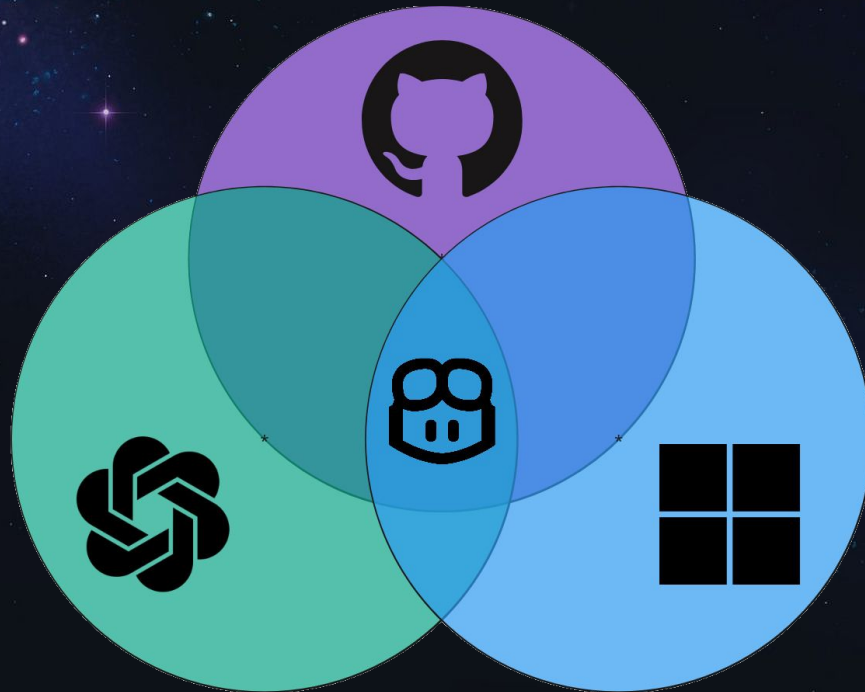
🔔 **Tip** For an [advanced search](#), use our [prefixes](#)





GitHub Copilot X

GitHub Copilot



Using GitHub Copilot Chat correlates with better code quality

85% of developers felt more confident in their code quality when authoring code with GitHub Copilot and GitHub Copilot Chat

85%



Code reviews were more actionable and completed 15% faster than without GitHub Copilot Chat

15%



88% of developers reported maintaining flow state with GitHub Copilot Chat

88%







GitHub Copilot

Codex > Chat GPT 3.5 Turbo > GPT 4*



GitHub Copilot Chat

Preview

GitHub  github.com |  5,049,233 installs |  (86) | Free Trial

AI chat features powered by Copilot

Installation

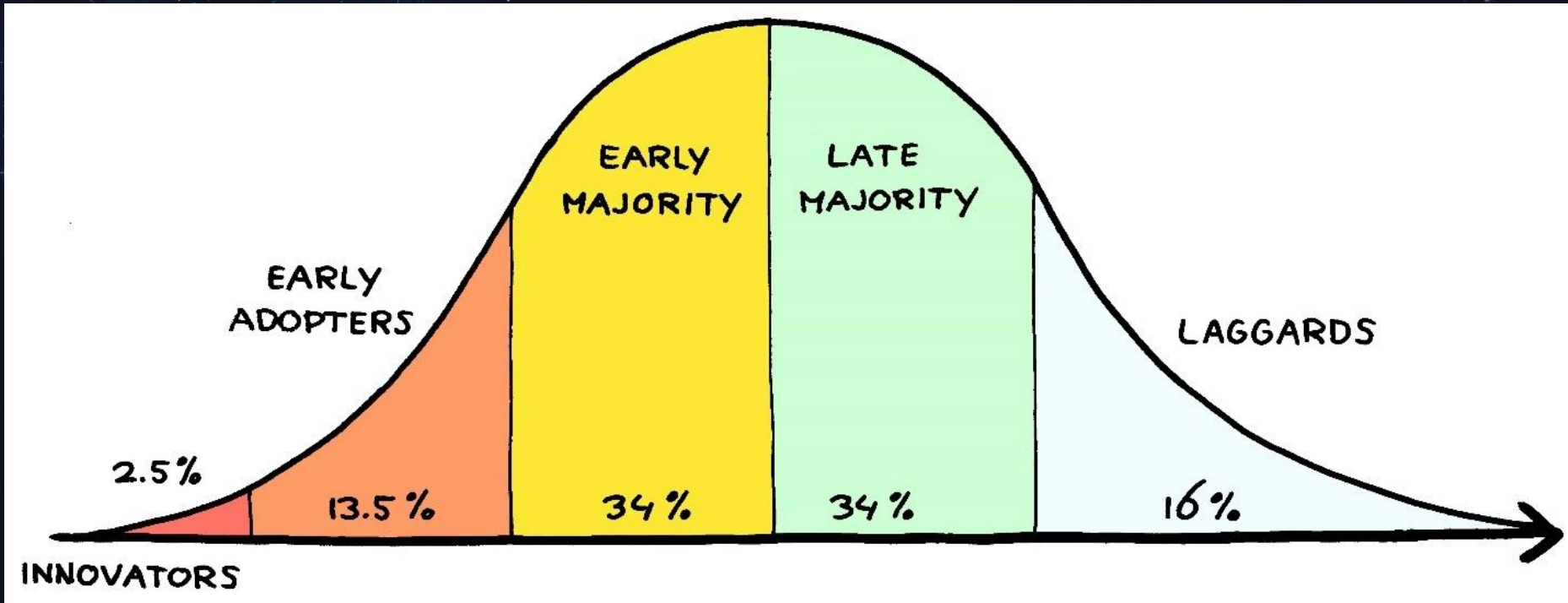
Launch VS Code Quick Open (Ctrl+P), paste the following command, and press enter.

```
ext install GitHub.copilot-chat
```

Copy


[More Info](#)

Technology Adoption Life Cycle



EXTENSIONS: MARKETPLACE

Copilot




GitHub Copilot

Your AI pair programmer

GitHub

436ms




GitHub Copilot Chat

AI chat features powered by Copilot

GitHub

32ms




GitHub Copilot Labs

Experimental features for GitHub ...

GitHub

98ms




Copilot Theme

A VSCode implementation of the t...

Benjamin Benais

185K 5

Install




GitHub Copilot Voice

A voice assistant for VS Code

GitHub

40K 5

Install




ChatGPT Copilot

An VS Code ChatGPT Copilot Exte...

Pengfei Ni

40K 5

Install




clara-copilot

Clara Copilot V3

BadBoy17G

18K 4.5

Install




Copilot for VS Code

JavaScript/TypeScript developmen...

Metatype

40K 3.5

Install




YouAI Copilot

An AI powered assistant to autoco...

YouAI

597 5

Install




Fex Copilot

Fex AI Buddy

Fex Copilot

25 5

Install




TyPy Copilot

Visual Studio Code extension to su...

typy

13 5

Install




极智副驾Geek Copilot

用极智副驾轻松写代码

bopoda

85

Install



Jui Copilot

用于使用Jui时的代码补全

文

92 5

Install

Visual Studio Code

Editing evolved

Start

New File...

Open File...

Open Folder...

Clone Git Repository...

Connect to...

Recent

Code (Workspace) ~/Code

learning-api-styles ~/Code/Oreilly

Walkthroughs

Get Started with VS Code

Discover the best customizations to make VS Code yours.

Learn the Fundamentals

Boost your Productivity

GitHub Copilot Updated

Get Started with Python Development Updated

More...

main*

0 0 0 0

Live Share

✓ Spell

tabnine starter

Copilot Chat Can

- **Generate unit test cases**
- **Generate documentation**
- **Generate code for a specific task**
- **Explain code and suggesting improvements**
- **Propose code fixes**
- **Answer coding questions**

WARNING Copilot Chat

- Limited scope
- Potential for bias
- Security risks
- Inaccurate code
- Matches with public code

Prompt Engineering Tips

1. **Goal**
2. **Clarity**
3. **Context**
4. **Refine**



Does it work?

*"60% of the time, It
works every time"*

And what
happened
next?



He shipped it
to PROD!

The background is a deep blue and black space scene. It features numerous small white stars, some with prominent four-pointed diffraction patterns. Faint, glowing nebulae in shades of blue and purple are visible, particularly on the right side. Several constellations are outlined with thin white lines, including a scorpion-like shape on the left and a cross-like shape on the right. The overall effect is a cosmic, starry night sky.

LABS