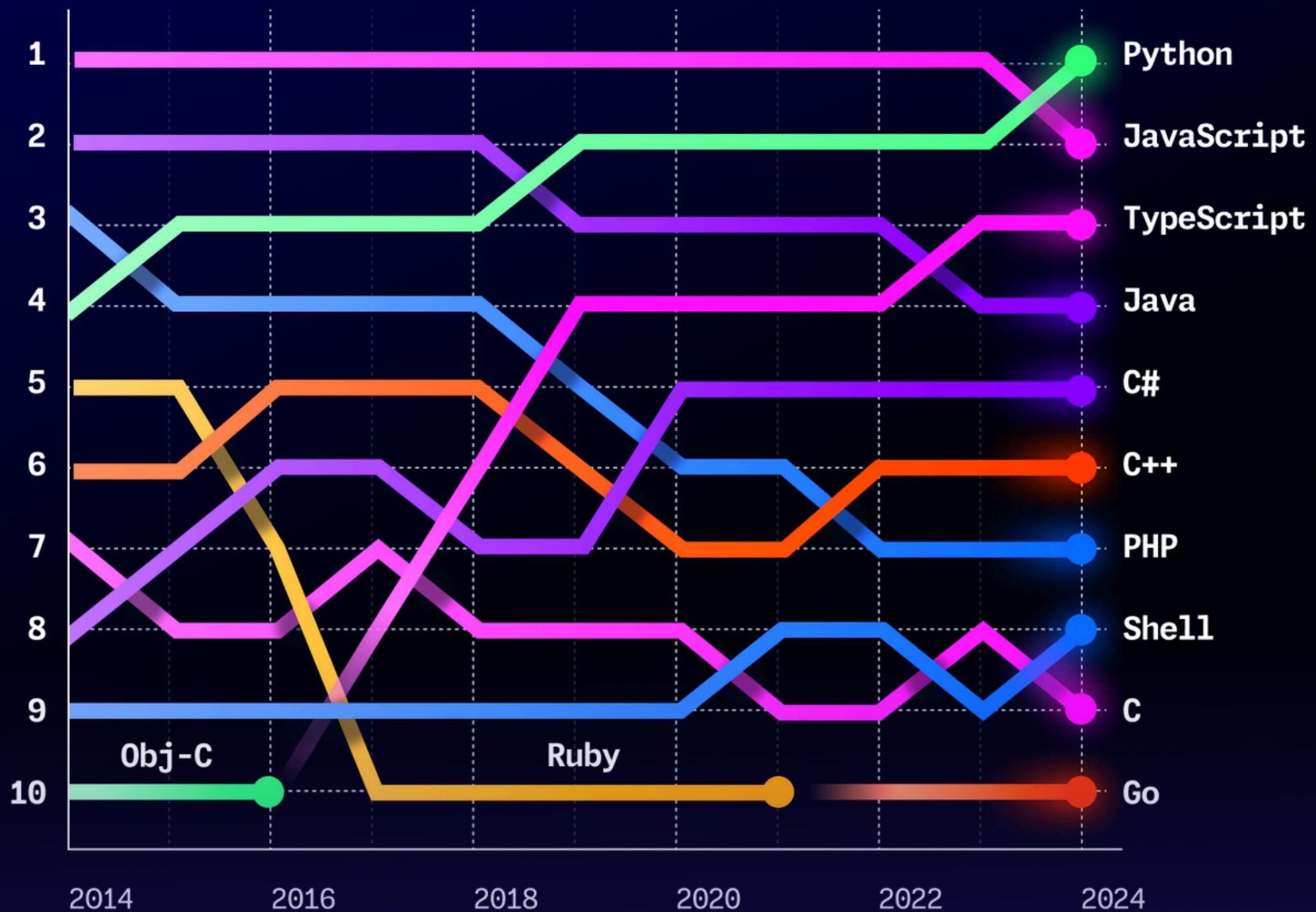# Top programming languages on GitHub

RANKED BY COUNT OF DISTINCT USERS CONTRIBUTING TO PROJECTS OF EACH LANGUAGE.

Rankings over time (2014–2024):

Rank	2024
1	Python
2	JavaScript
3	TypeScript
4	Java
5	C#
6	C++
7	PHP
8	Shell
9	C
10	Go

Labels on chart: Obj-C, Ruby

Years: 2014, 2016, 2018, 2020, 2022, 2024

Python
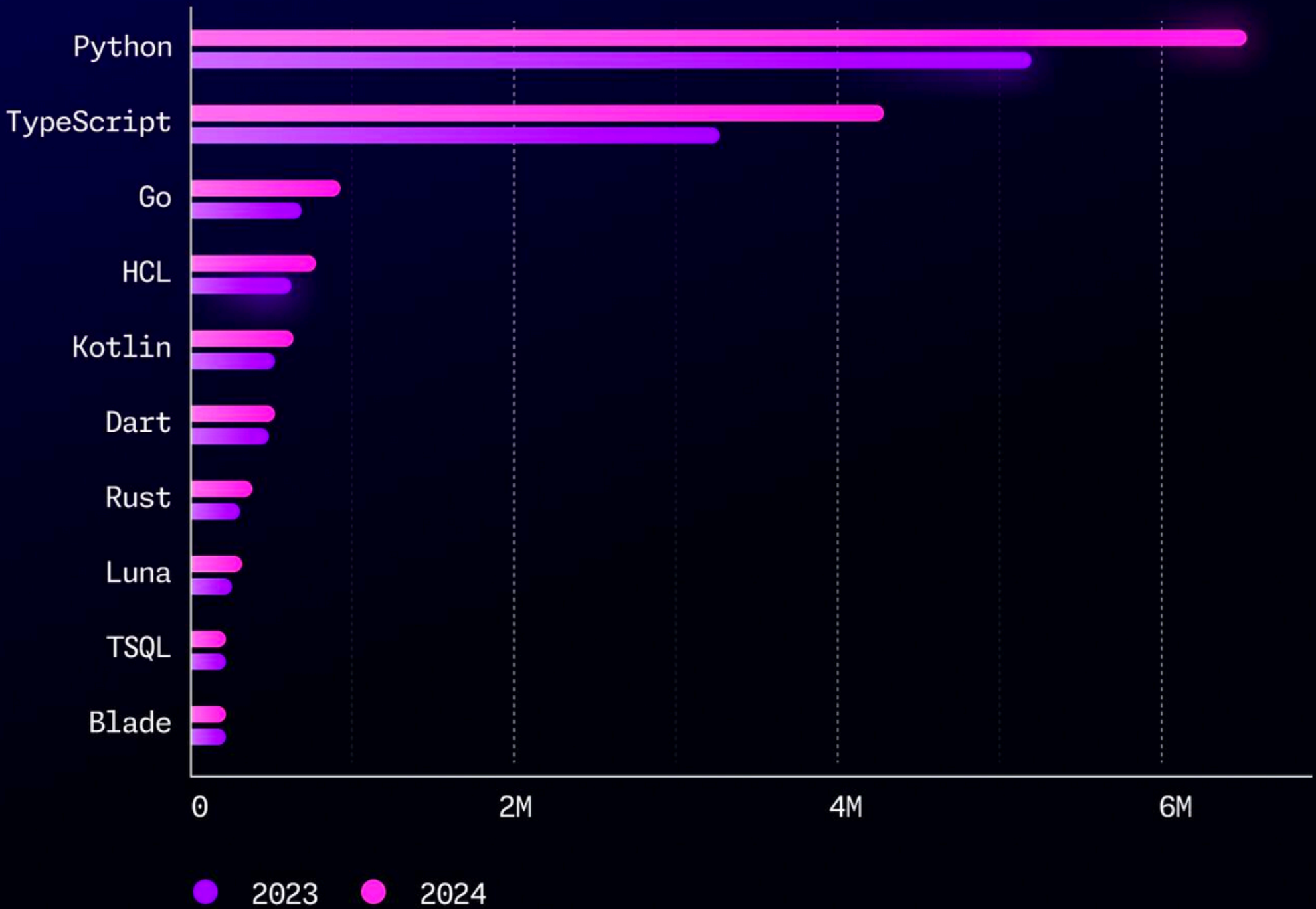BEATS OUT JAVASCRIPT AS MOST POPULAR LANGUAGE

IaC
CONTINUES TO GROW WITH HCL AND SHELL
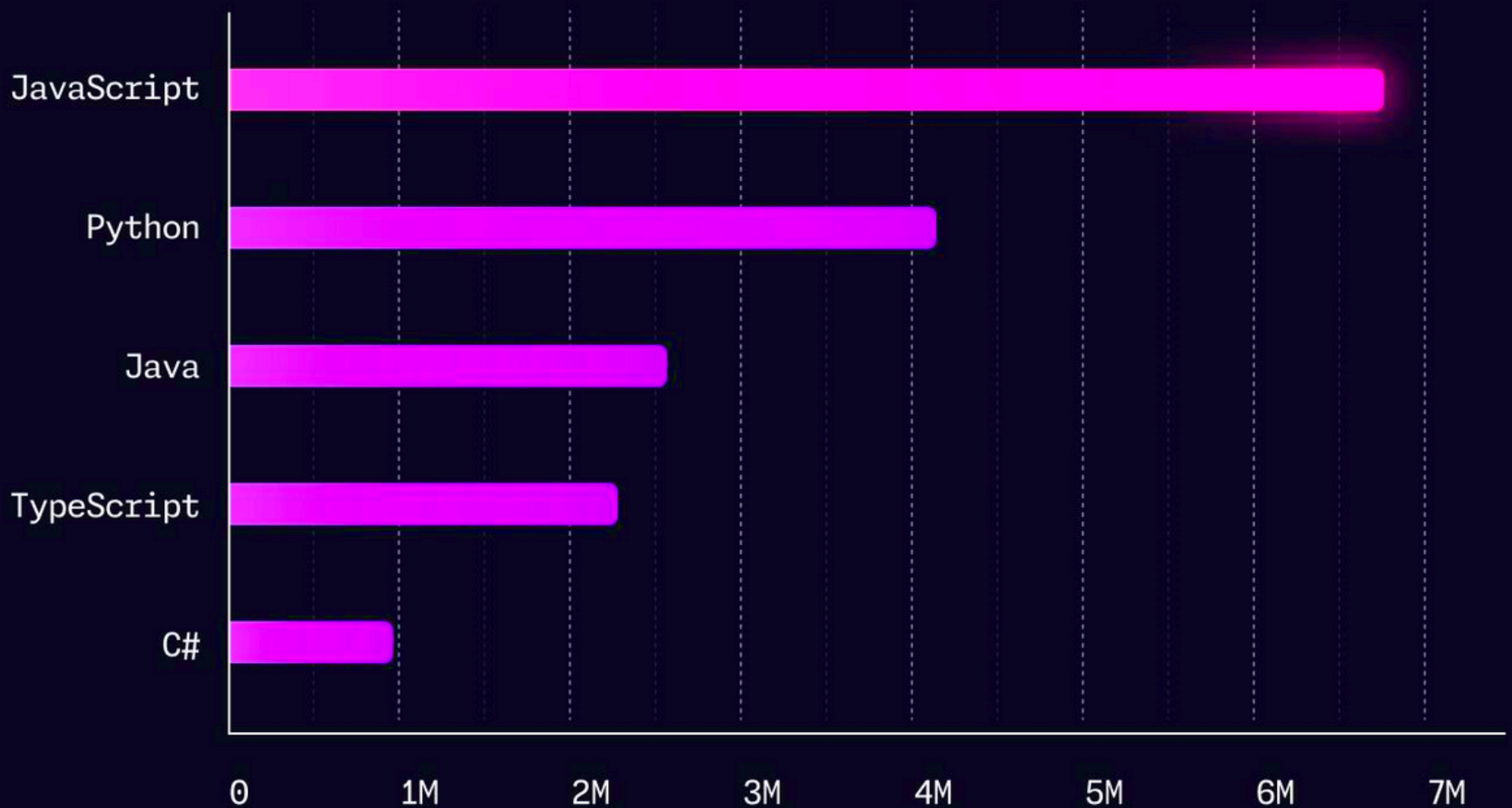
TypeScript
CONTINUES STRONG GROWTH AS 3RD MOST POPULAR LANGUAGE

Top 10 fastest growing languages in 2024

TAKEN BY PERCENTAGE GROWTH OF CONTRIBUTORS ACROSS ALL CONTRIBUTIONS ON GITHUB.

Python	
TypeScript	
Go	
HCL	
Kotlin	
Dart	
Rust	
Luna	
TSQL	
Blade	

0   2M   4M   6M

● 2023   ● 2024

Top 5 languages most commonly used in repositories created within the last 12 months on GitHub

Language	Value
JavaScript	~6.6M
Python	~4M
Java	~2.4M
TypeScript	~2.1M
C#	~0.9M

Axis: 0, 1M, 2M, 3M, 4M, 5M, 6M, 7M

Number of public generative AI projects on GitHub

WITH 98% YEAR-OVER-YEAR GROWTH FROM 2023 TO 2024.

Total repositories

150K
100K
50K
0

2012   2016   2020   2024

~70K
GENERATIVE AI
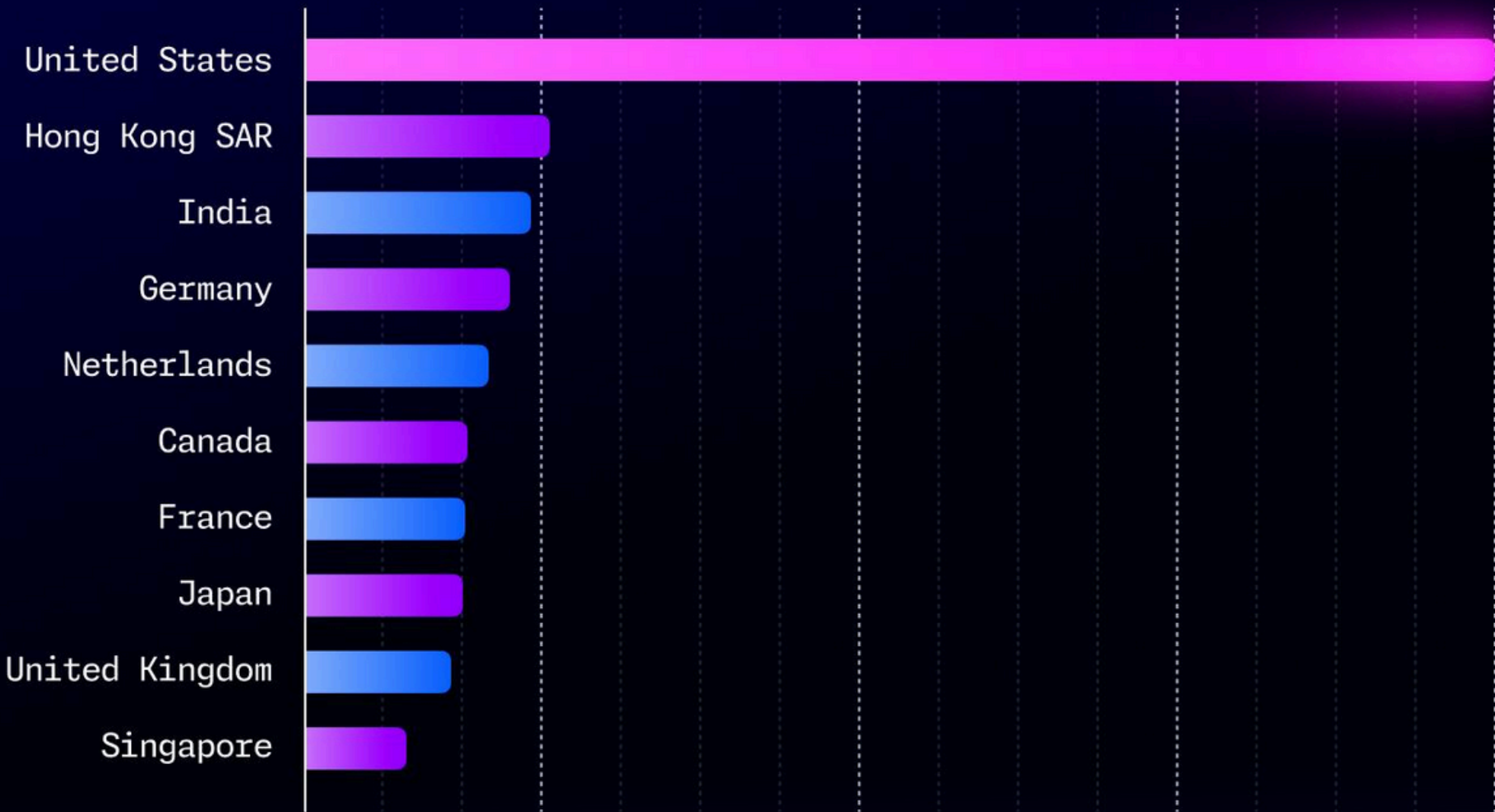PROJECTS STARTED

137K
PUBLIC GENERATIVE AI
PROJECTS WITH 98%
YOY GROWTH

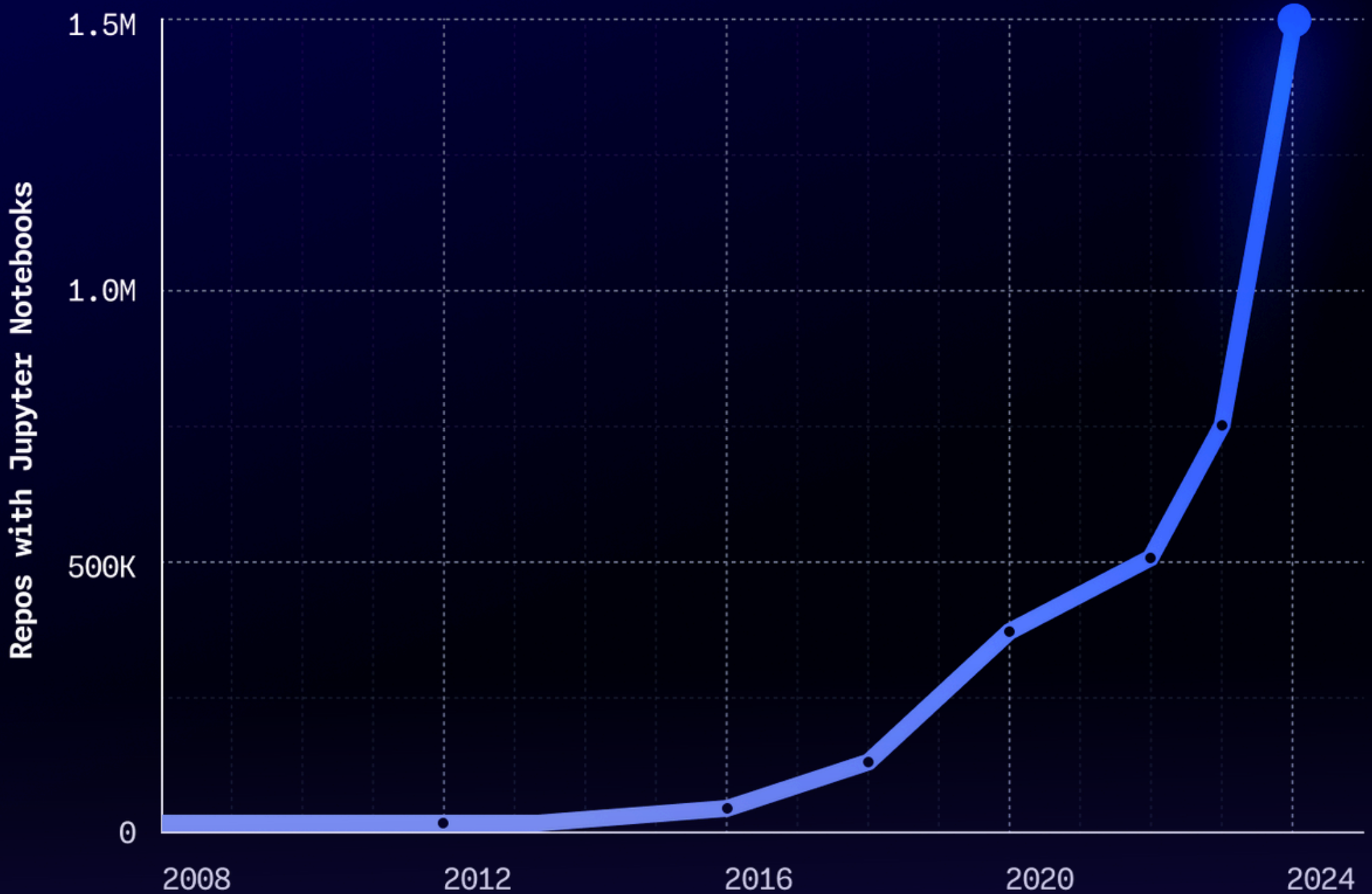**AI**
MODELS BECOME PART OF
THE DEVELOPER'S STACK

Top 10 global communities with the most contributions to generative AI projects on GitHub in 2024

CALCULATED BY CONTRIBUTIONS BY REGIONS TO GENERATIVE AI PROJECTS ON GITHUB.

Jupyter Notebook usage on GitHub

BY DISTINCT PUBLIC REPOSITORIES WITH AT LEAST ONE JUPYTER NOTEBOOK BY THE YEAR THAT THE REPOSITORY WAS CREATED.

~1B

CONTRIBUTIONS TO PUBLIC & OPEN SOURCE PROJECTS IN 2024

15%

YOY SPIKE IN JAVASCRIPT PACKAGE CONSUMPTION VIA NPM

Jupyter Notebooks

USAGE SURGES AMID AI AND PYTHON GROWTH