

# A BRIEF OVERVIEW OF AI

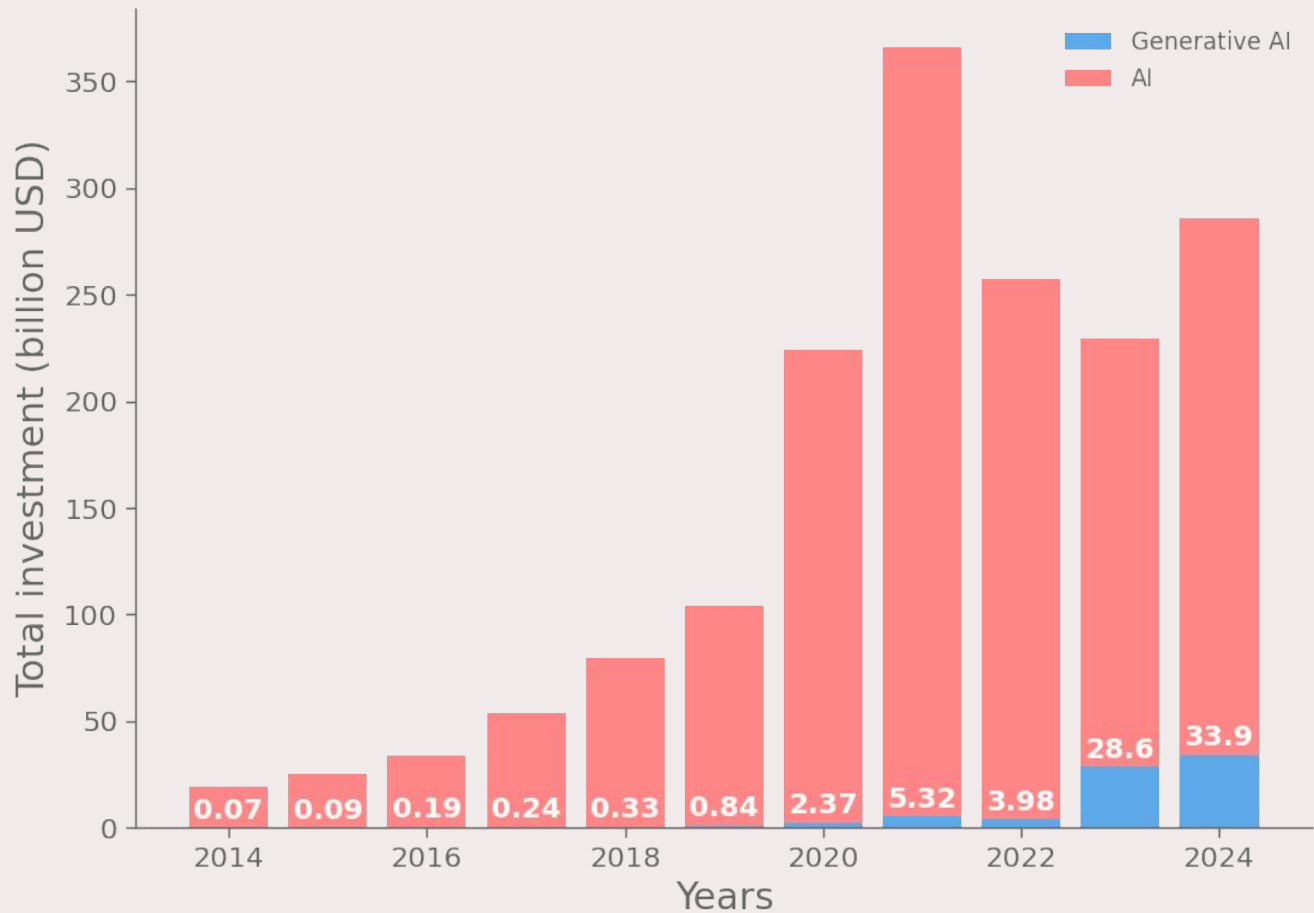
A sector by sector analysis

Giovanni Novati 68642A

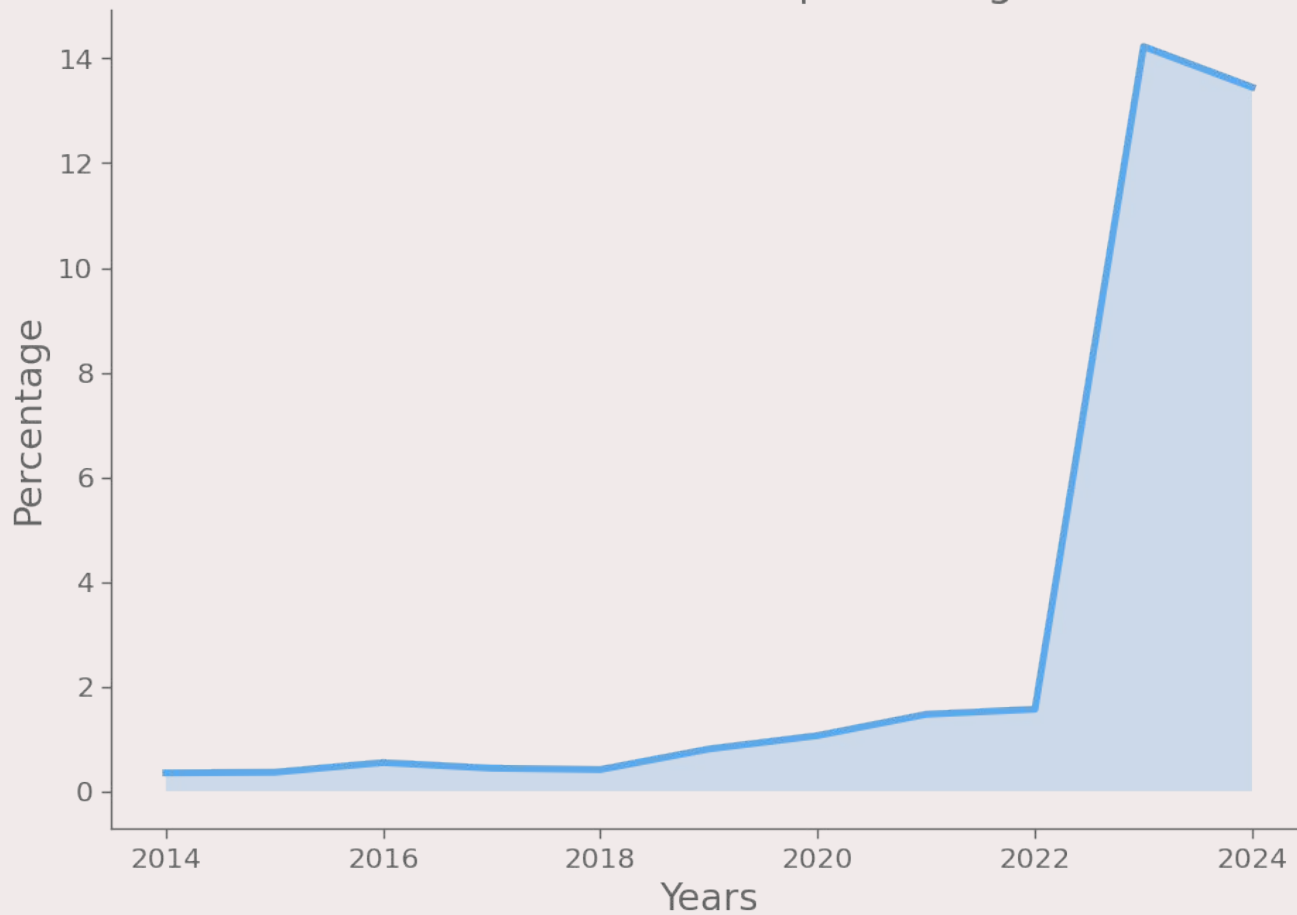
Simone Alessandro Casciaro 76678A

**ECONOMY**

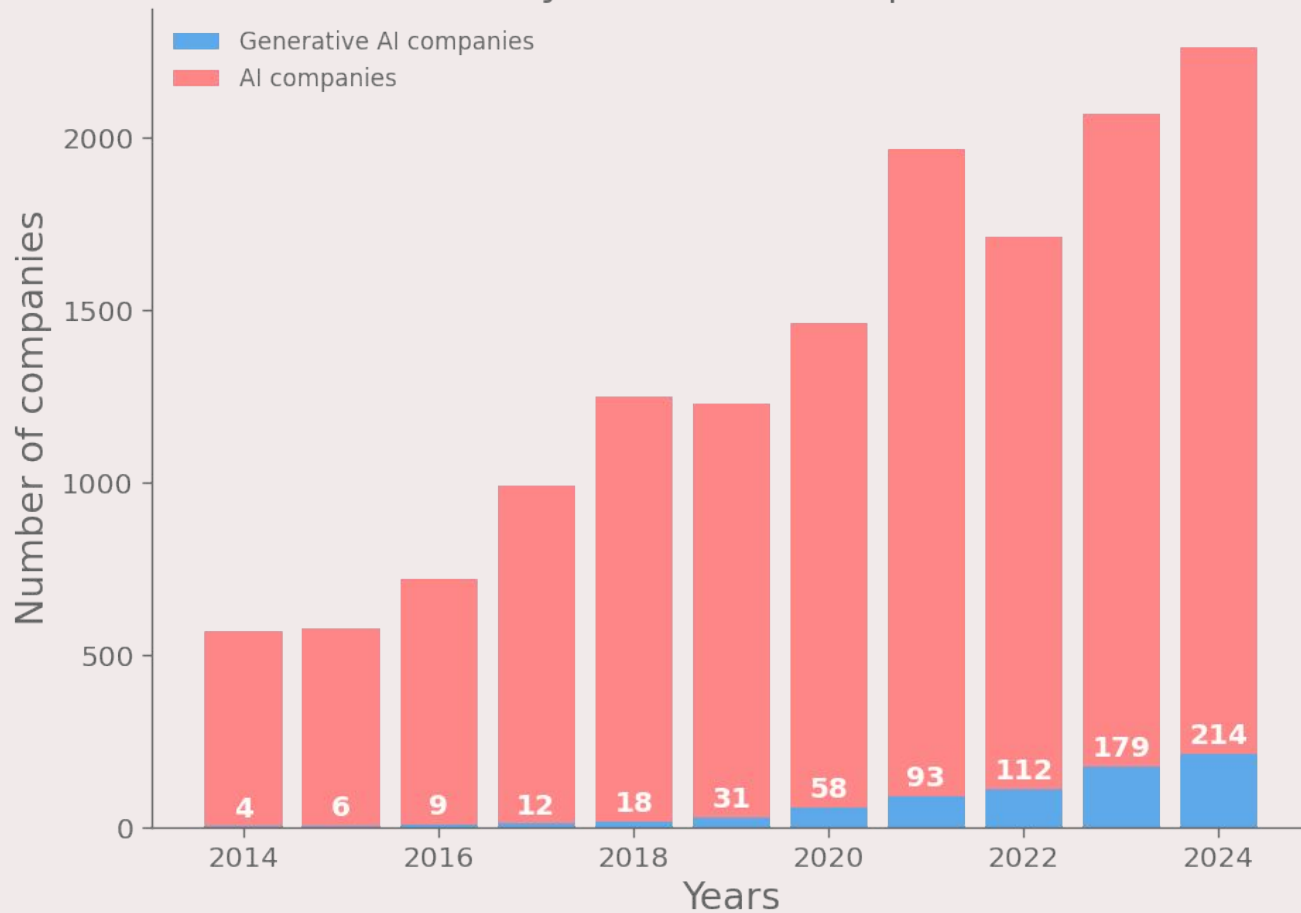
## Global investment in the AI sector



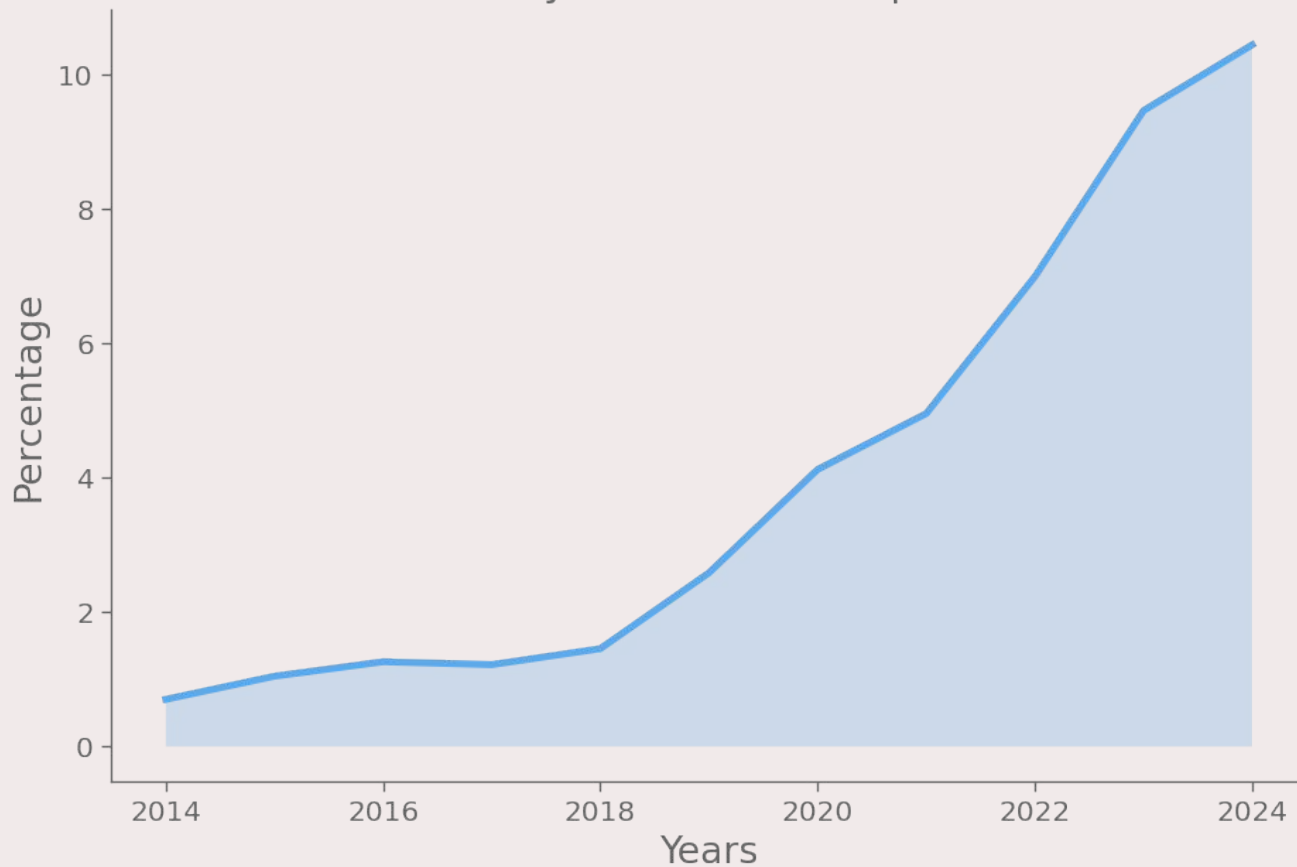
Generative AI investments as percentage of total AI



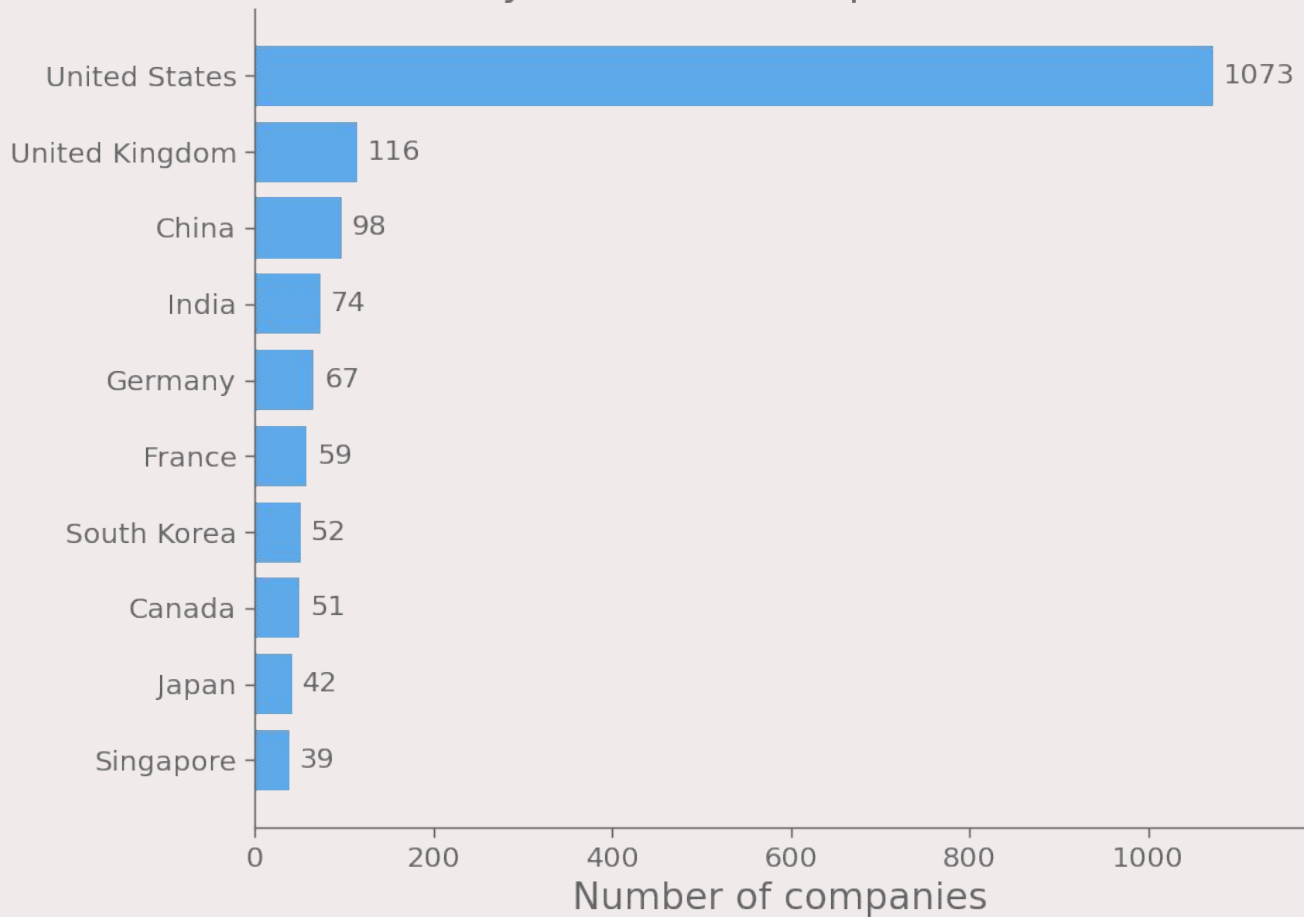
## Newly funded AI companies



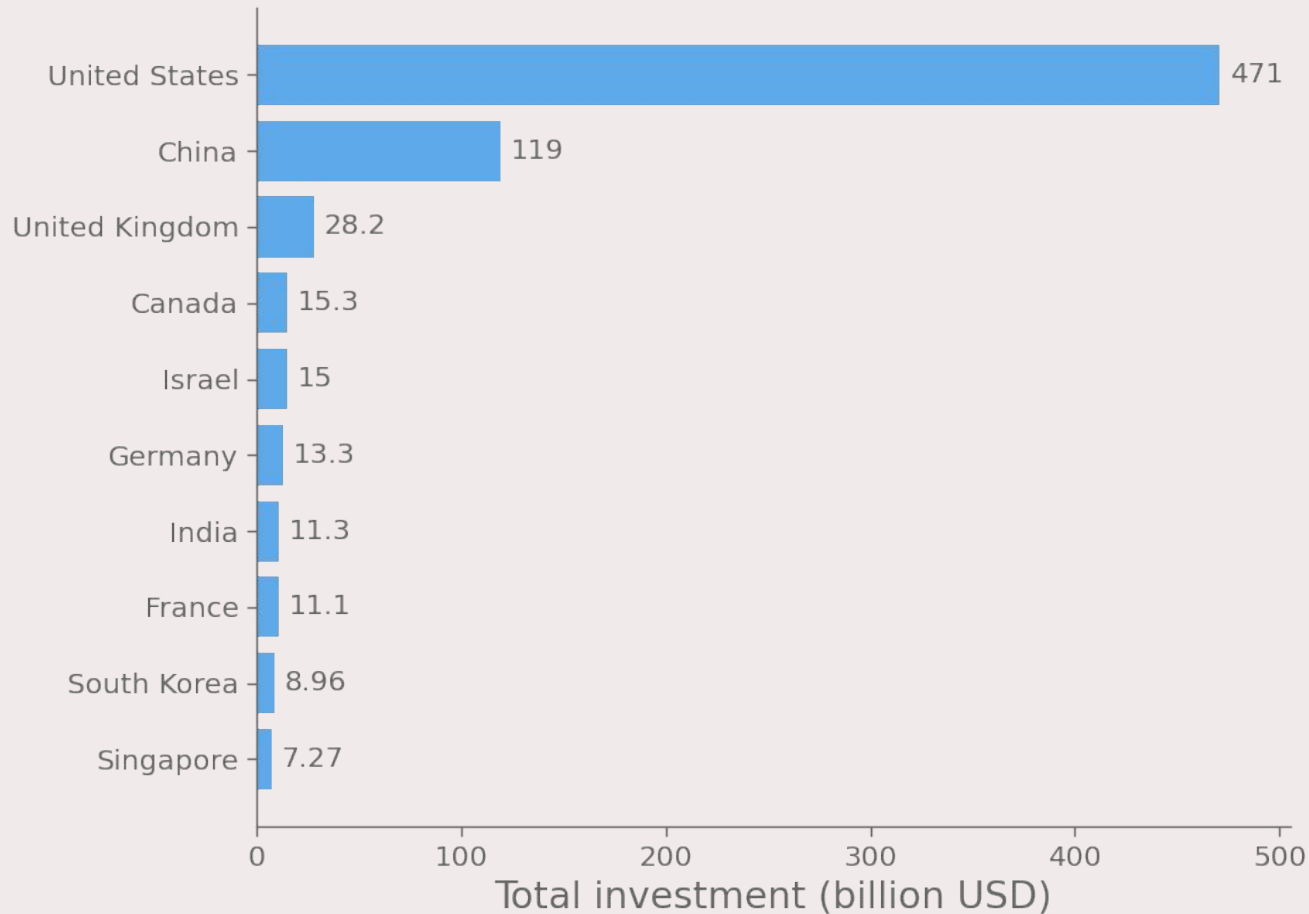
Generative AI companies as percentage  
of newly funded AI companies



## Newly funded AI companies in 2024

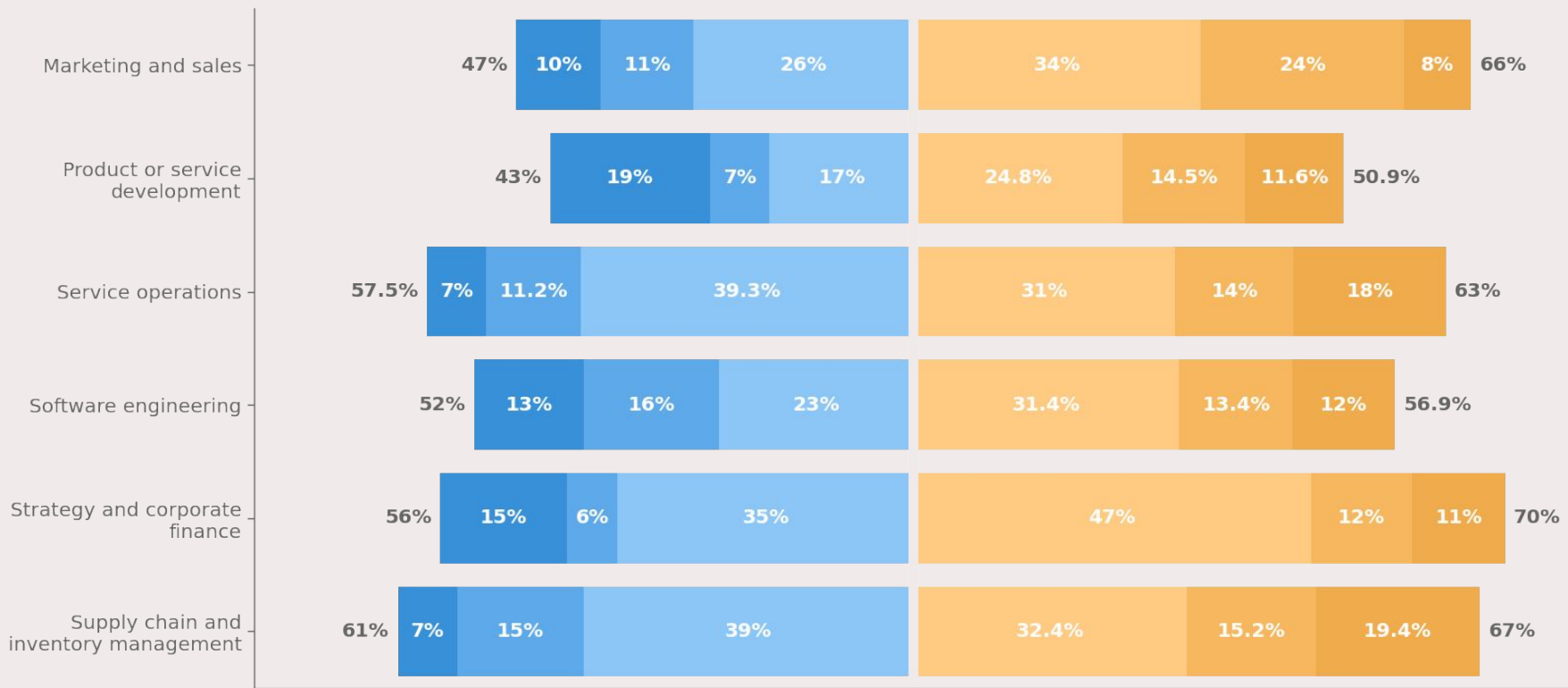


## Private investments in AI from 2013 to 2024



## Company cost reductions and revenue gains thanks to generative AI in 2023

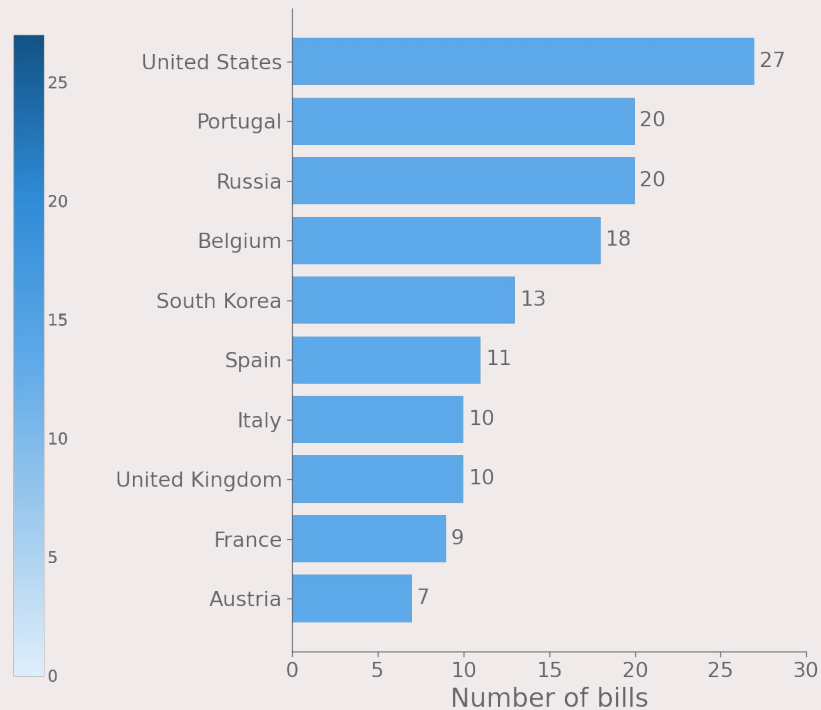
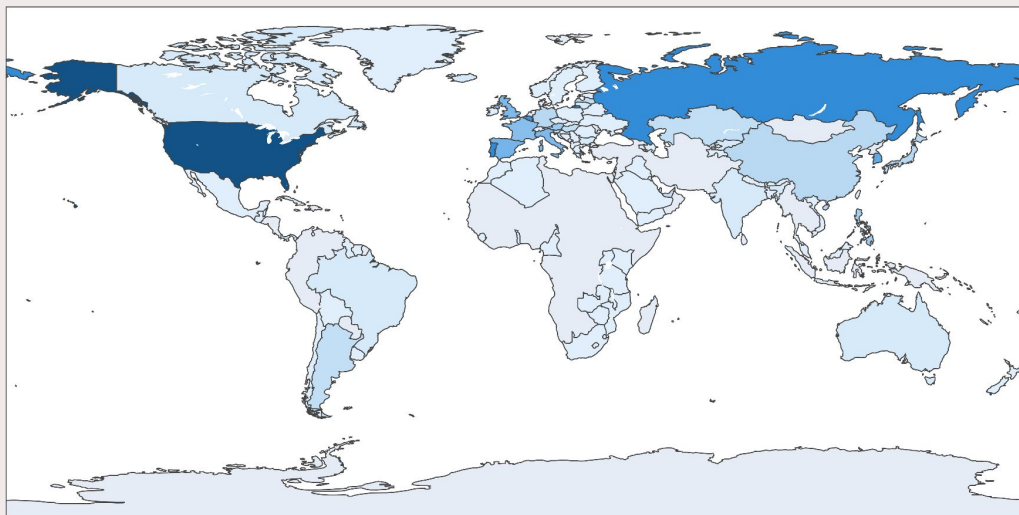
■ Decrease by ≥20%
■ Decrease by 11-19%
■ Decrease by ≤10%
■ Increase by ≤5%
■ Increase by 6-10%
■ Increase by >10%



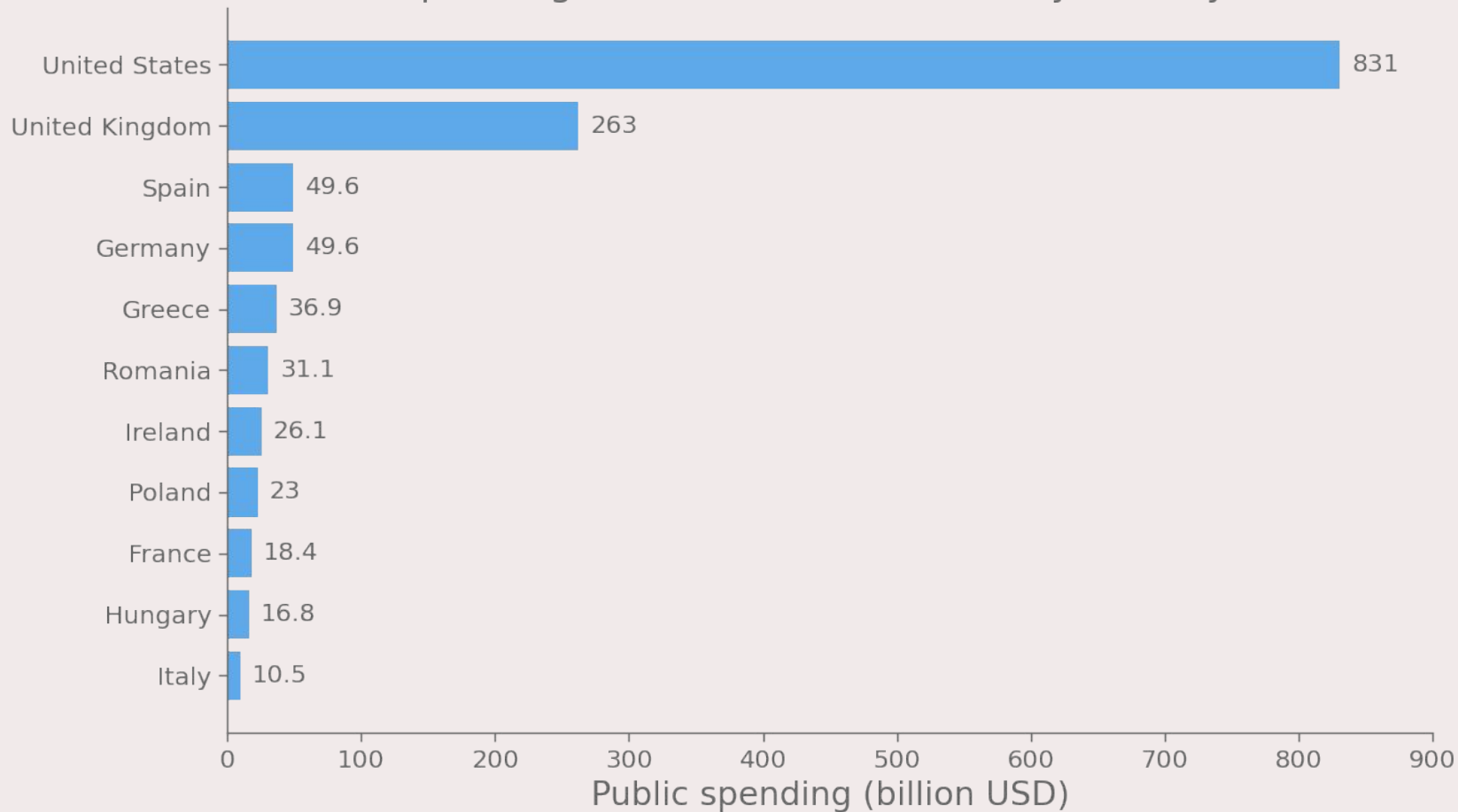
Percentage of respondents

# **POLICY AND GOVERNANCE**

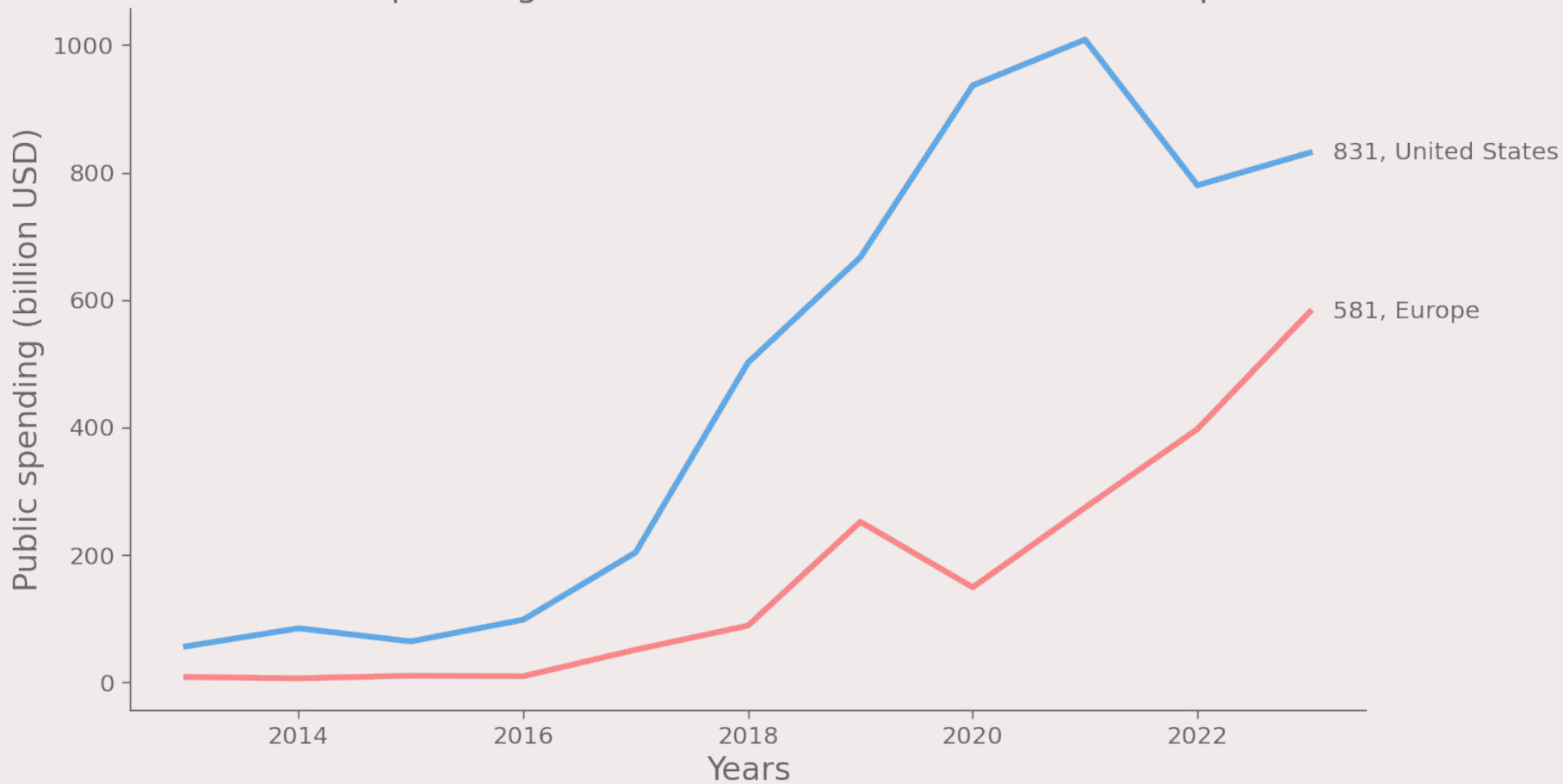
## Number of AI-related bills passed into law from 2016 to 2024



## Public spending on AI-related contracts by country in 2023



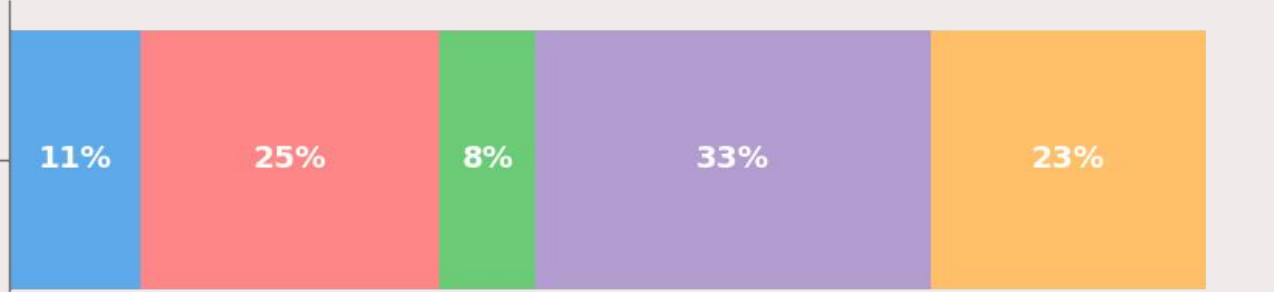
Public spending on AI-related contracts USA vs Europe



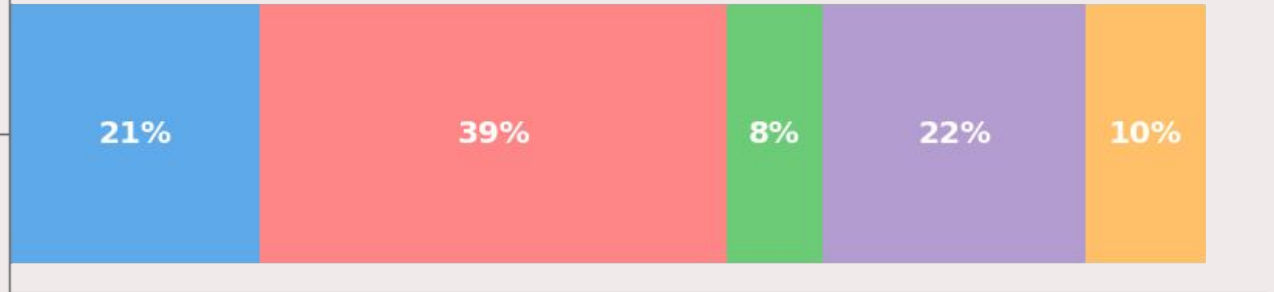
## Global perceived opinion of AI on current jobs

Very likely    Somewhat likely    Don't Know    Not very likely    Not likely at all

AI will replace your current job in the next 5 years

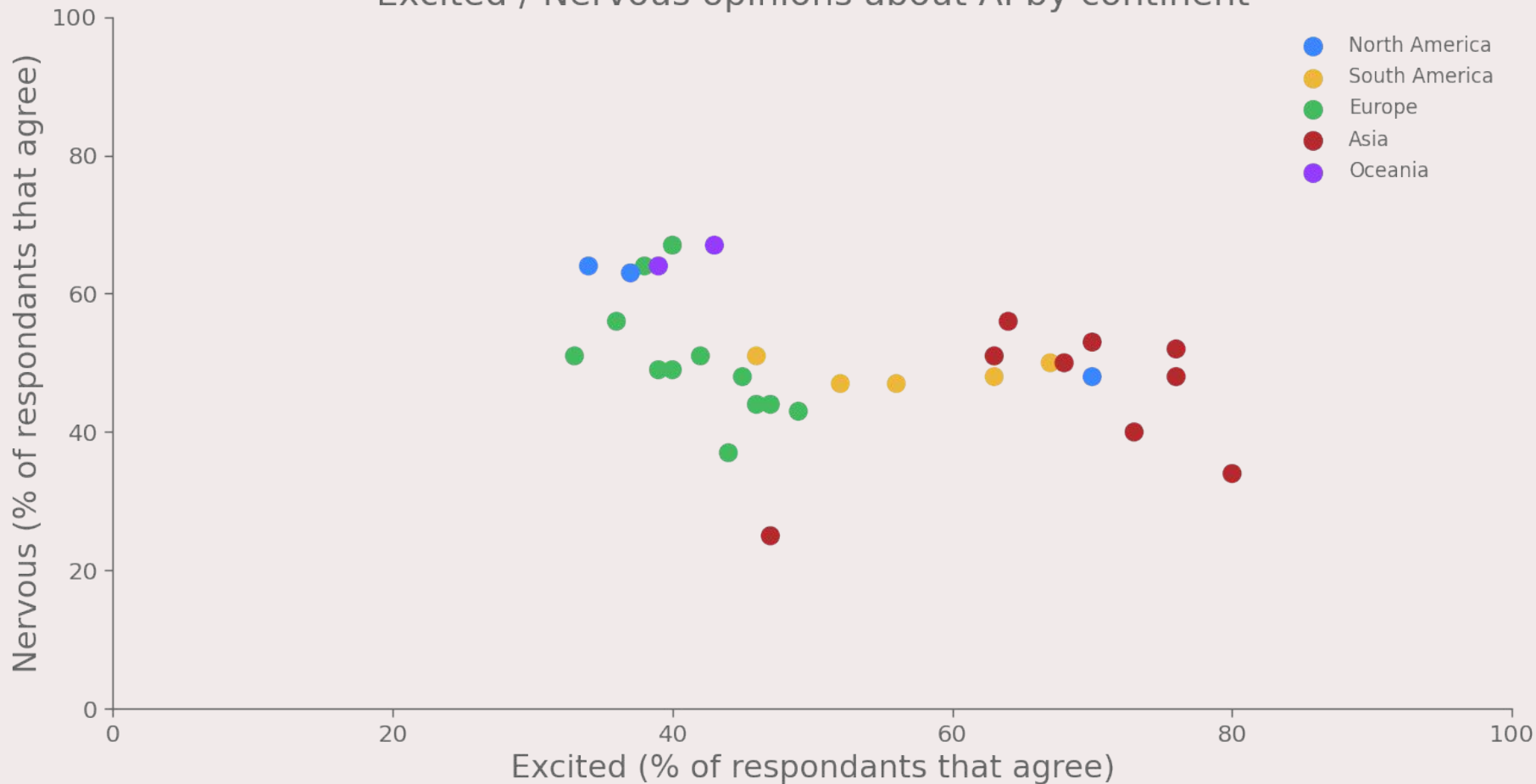


AI will change how you do your current job in the next 5 years



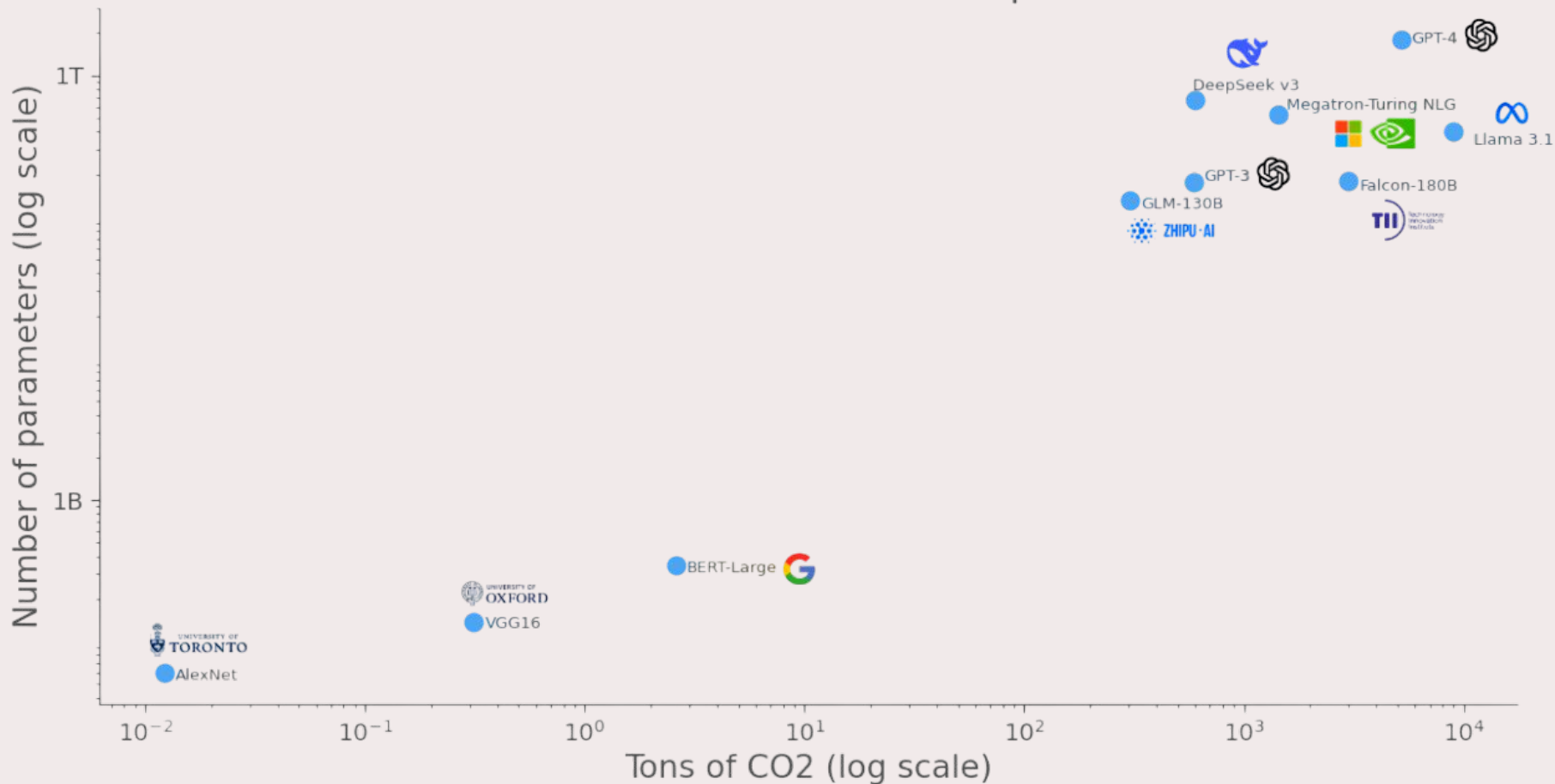
Percentage of respondents

Excited / Nervous opinions about AI by continent

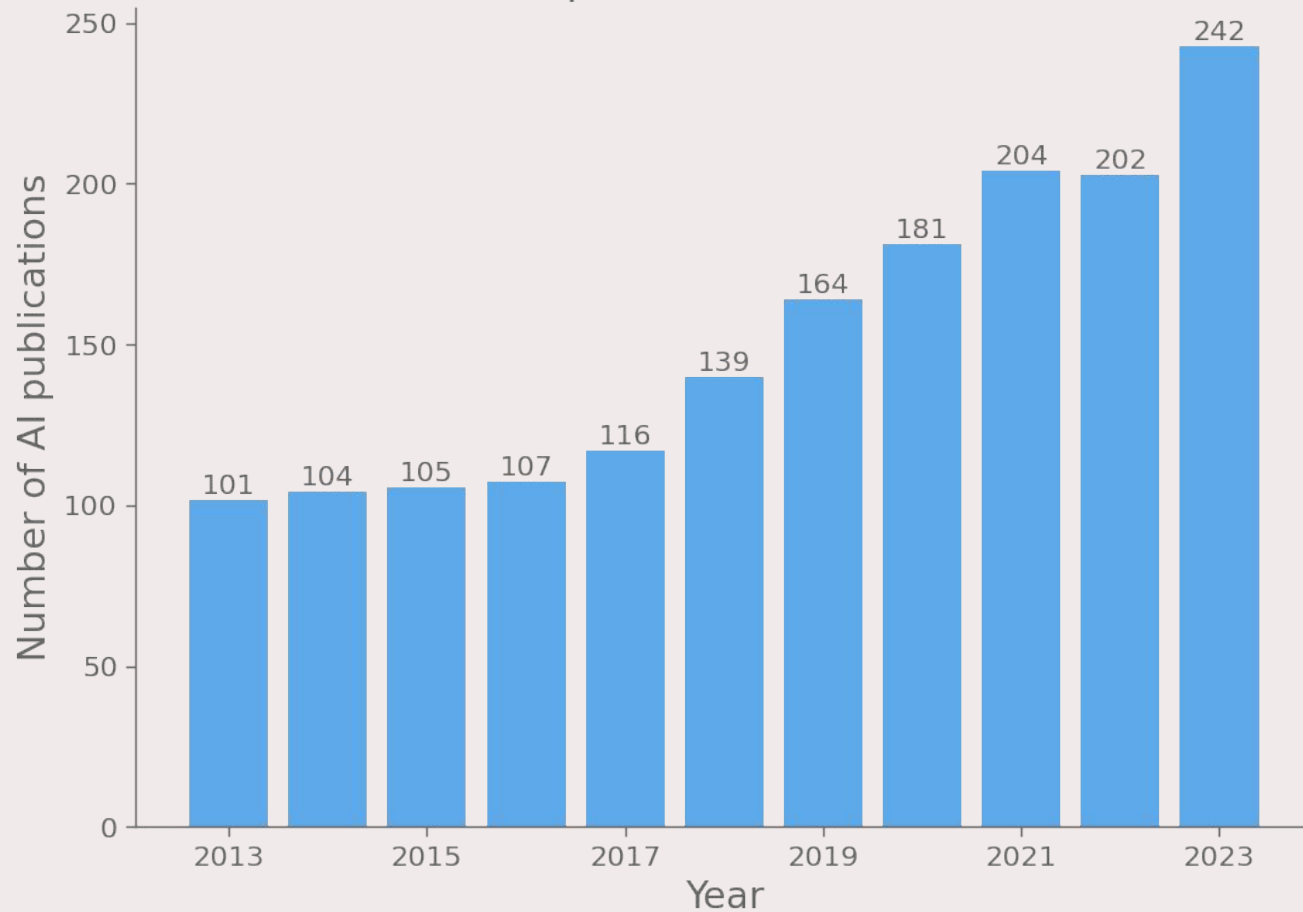


# RESEARCH AND DEVELOPMENT

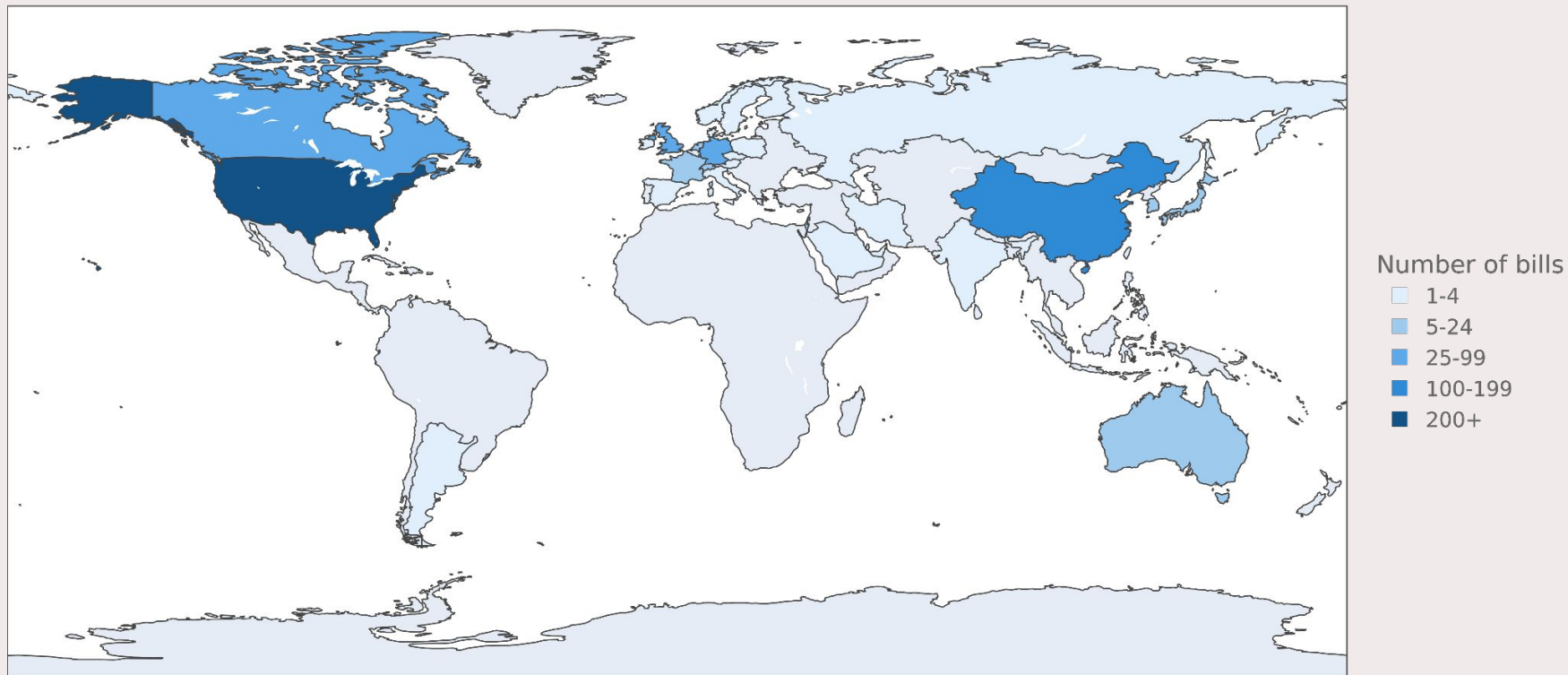
# Carbon emissions and number of parameters



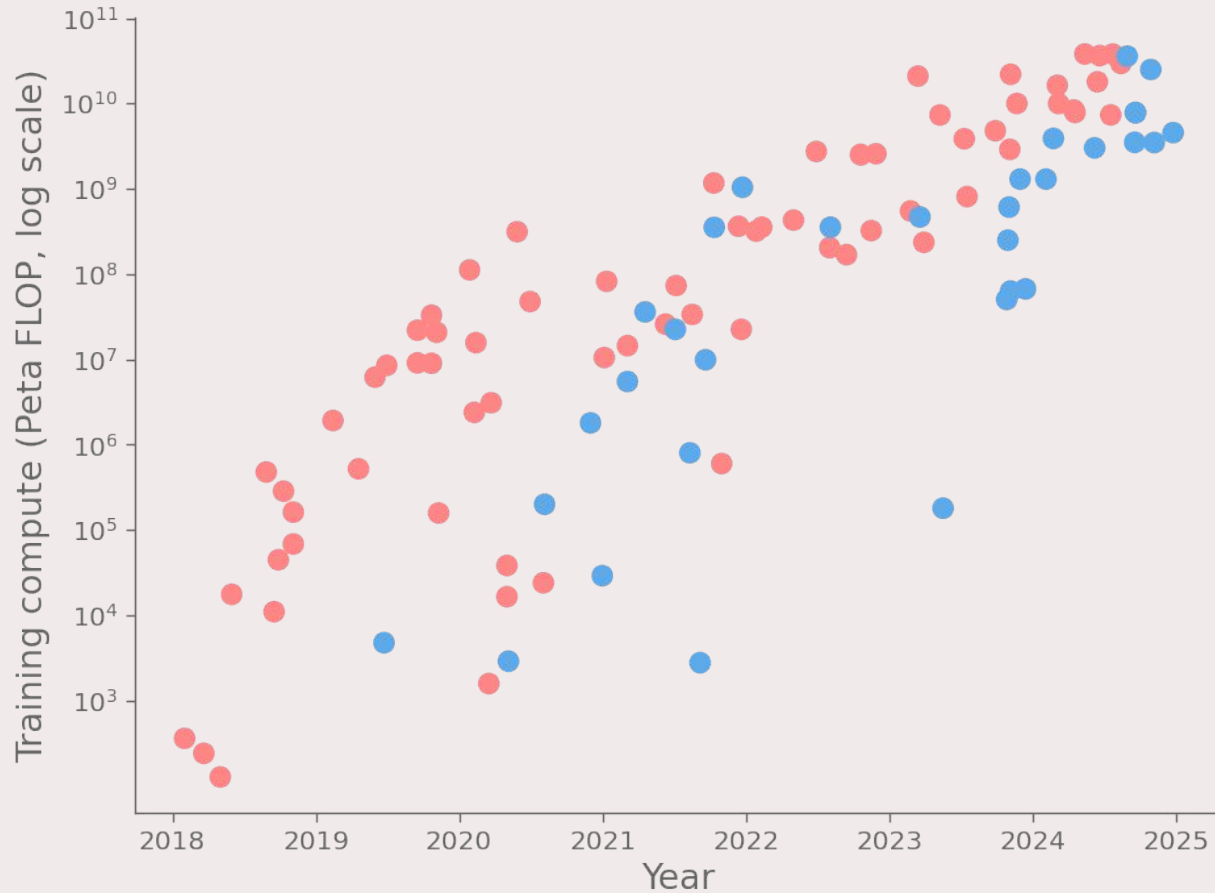
Number of AI publications in CS worldwide



## Number of AI-related bills passed into law from 2016 to 2024

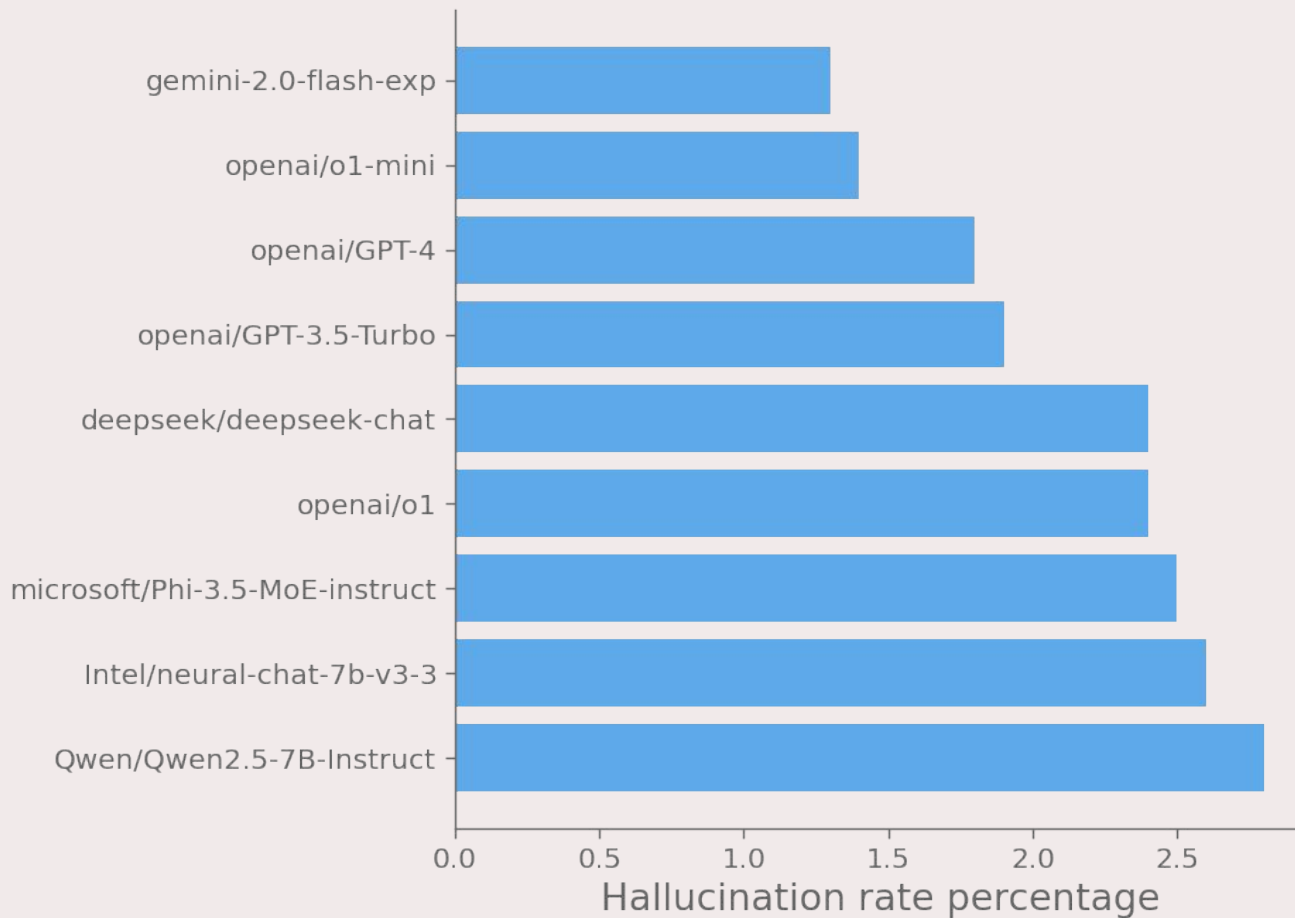


# Training compute of select notable AI models in the United States and China

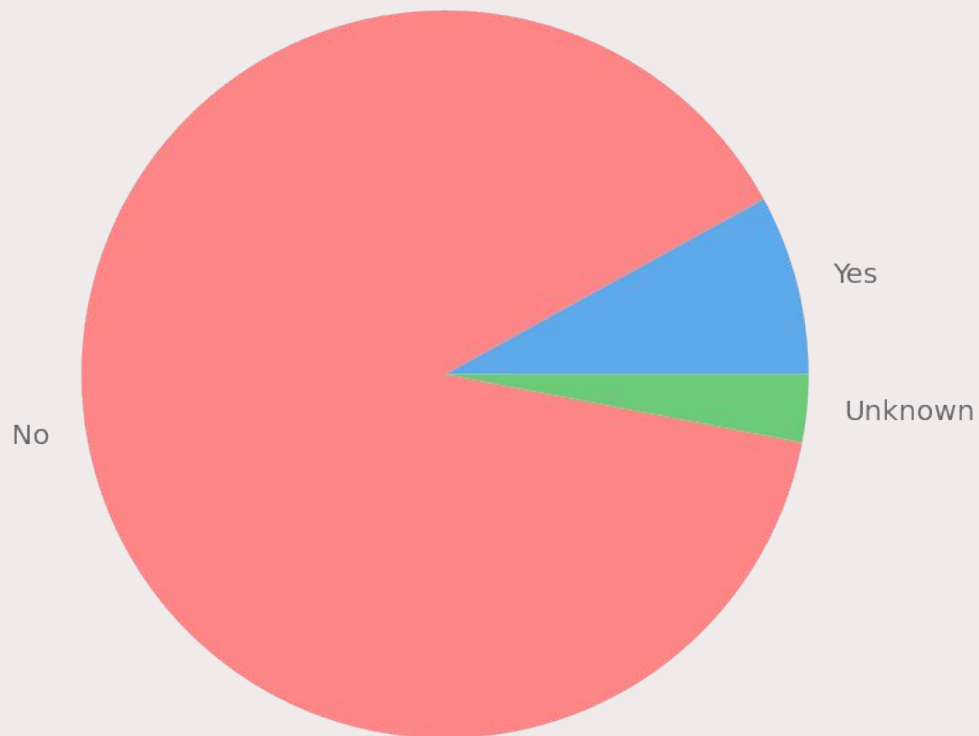


**RESPONSIBLE AI**

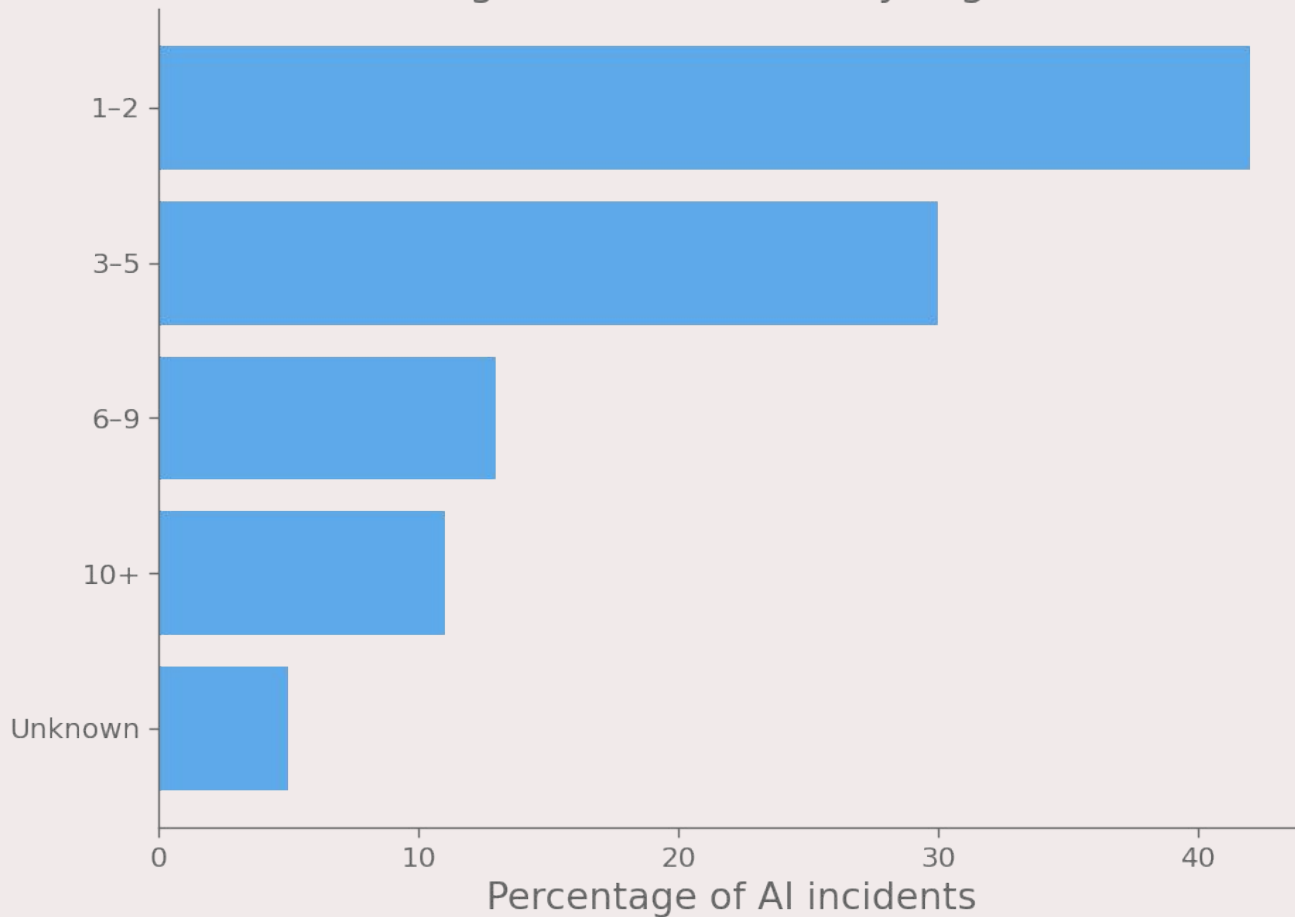
Hallucination rate of the latest models



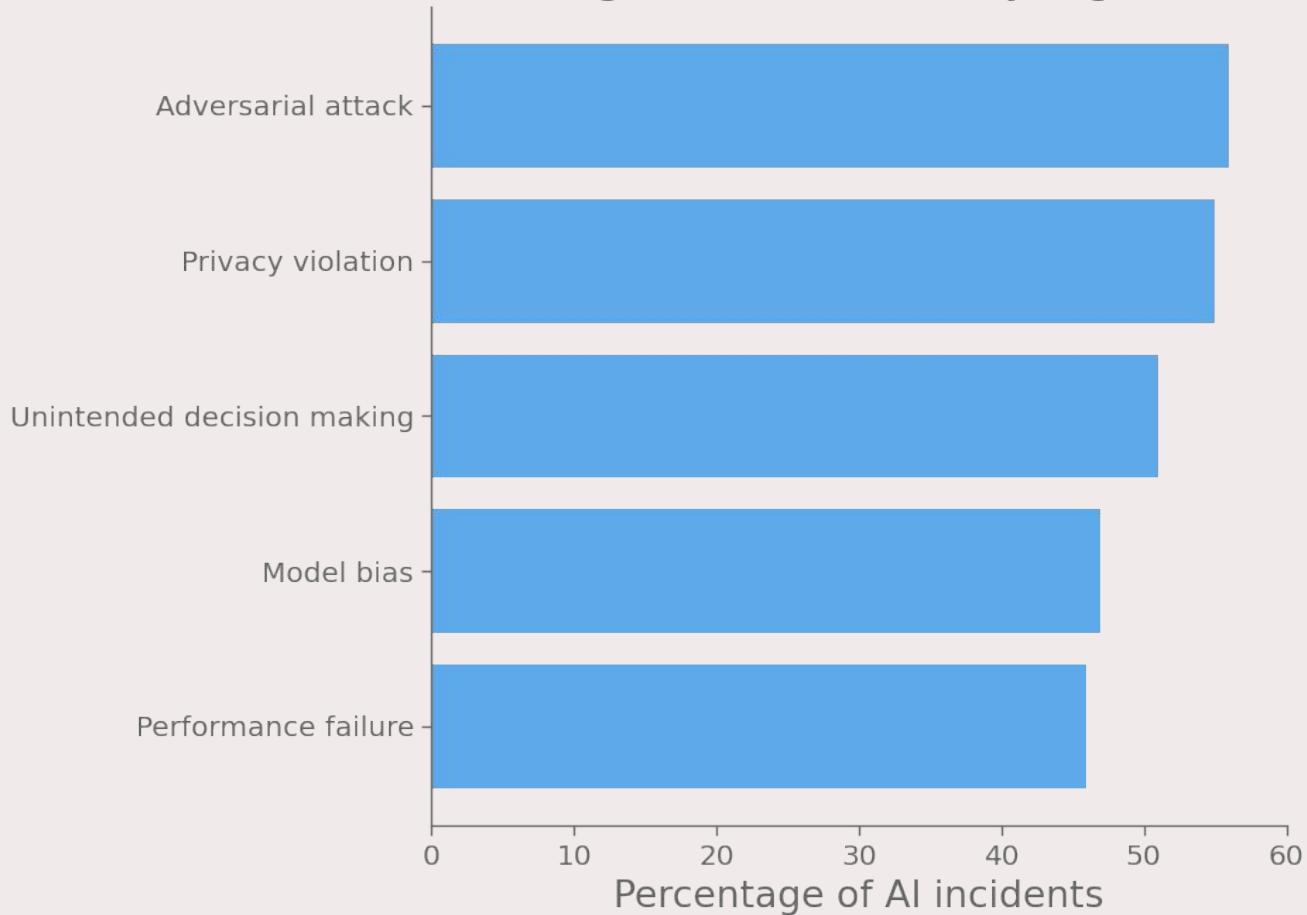
## Percentage of organizations who experienced AI incidents



Percentage of AI incidents by organization

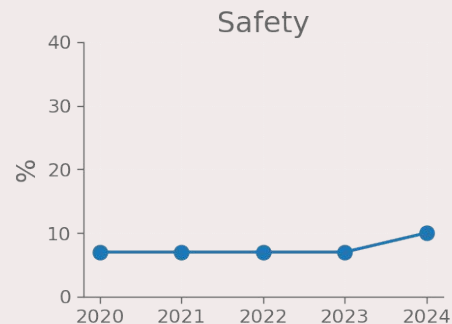
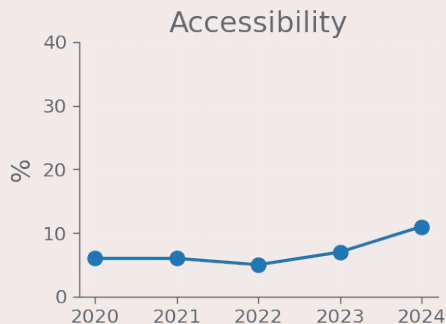
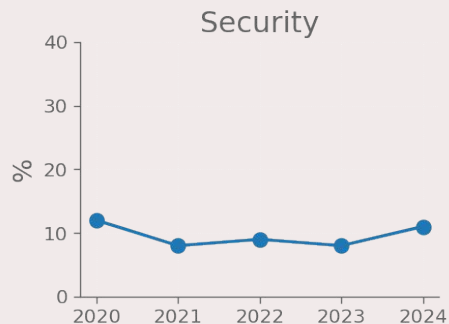
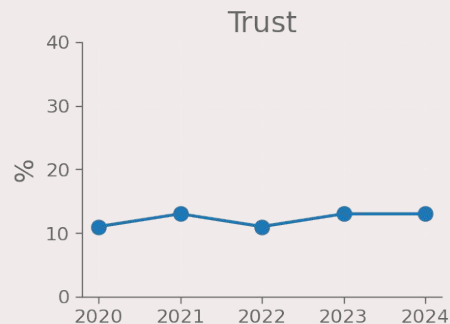
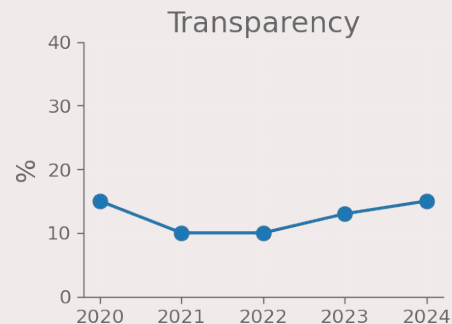
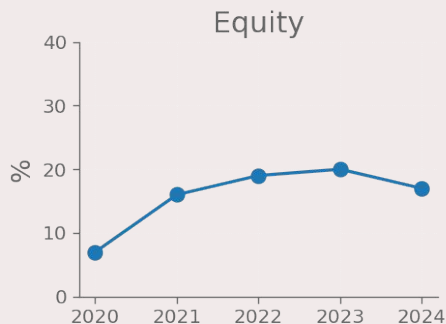
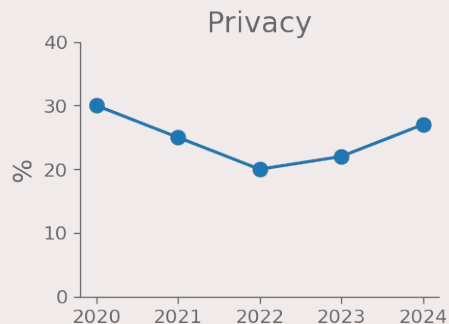
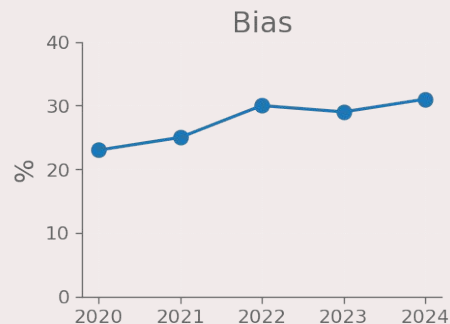


Percentage of AI incidents by organization

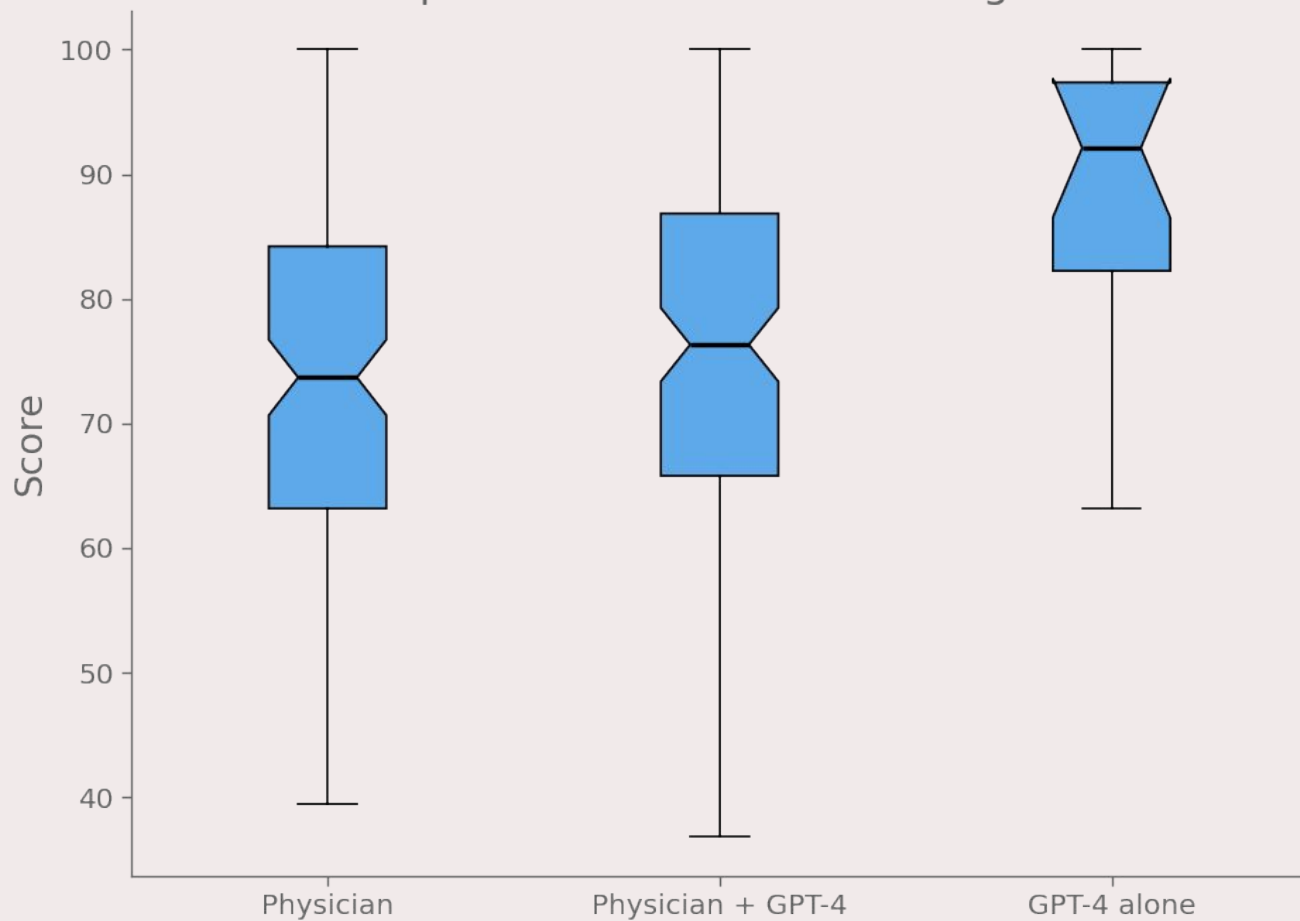


# SCIENCE AND MEDICINE

# Top 8 ethical concerns discussed in medical AI ethics publications

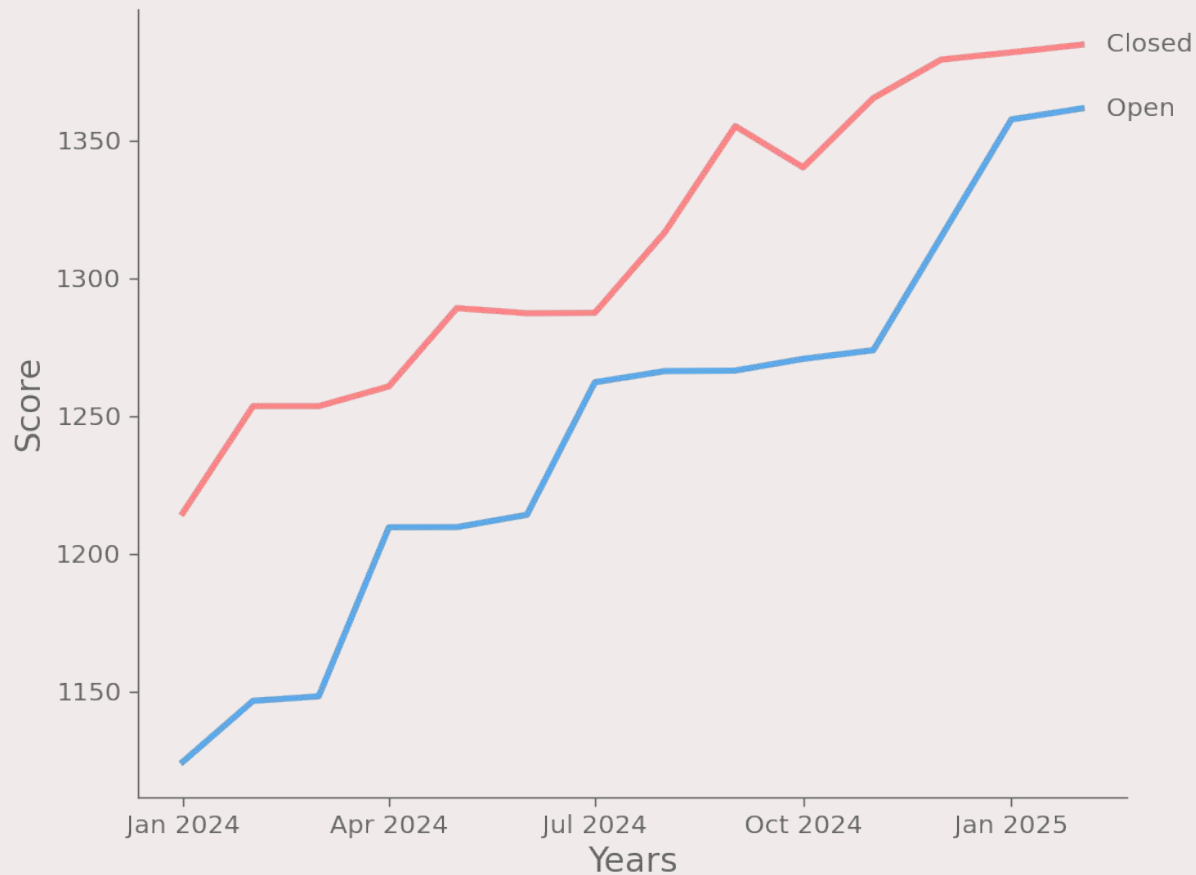


## LLM performance in clinical diagnosis



# TECHNICAL PERFORMANCE

Performance of top closed/open models over years



# FONTI

<https://hai.stanford.edu/ai-index/2025-ai-index-report>

<https://www.quid.com/2024-stanford-ai-index-report>

<https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-2024>

[https://ifr.org/img/worldrobotics/Press\\_Conference\\_2024.pdf](https://ifr.org/img/worldrobotics/Press_Conference_2024.pdf)

<https://www.ipsos.com/en/global-trends-2024>

<https://www.fda.gov/medical-devices/software-medical-device-samd>

<https://med.stanford.edu/raisehealth.html>

<https://epoch.ai/data/machine-learning-hardware>

<https://www.ipsos.com/en/global-trends-2024>

**GRAZIE PER L'ATTENZIONE**