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Stanford just released a MASSIVE 386-page report on the state of AI.

Here are the 12 most interesting trends that you should know.

3:07 PM · Apr 3, 2023 · **3.1M** Views

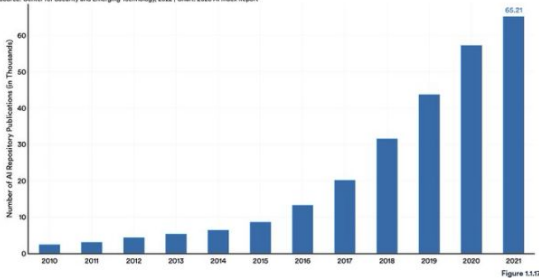**2,618** Retweets   **239** Quotes   **12.6K** Likes

AI research has been heating up for years, with no signs of slowing down

Number of AI Repository Publications, 2010–21
Source: Center for Security and Emerging Technology, 2022 | Chart: 2023 AI Index Report

65.21

Figure 1.1.17

AI models are getting big, and fast

Number of Parameters of Significant Machine Learning Systems by Sector, 1950–2022
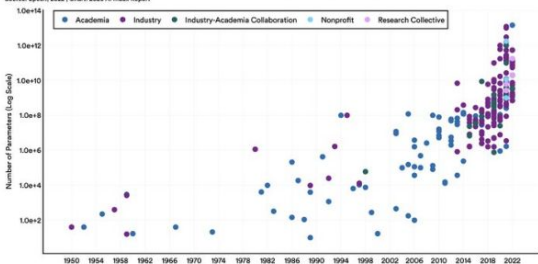Source: Epoch, 2022 | Chart: 2023 AI Index Report

Academia • Industry • Industry-Academia Collaboration • Nonprofit • Research Collective

Figure 1.2.9

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New AI models today get MILLIONS times more training than 10 years ago.

Training Compute (FLOP/s) of Significant Machine Learning Systems by Sector, 1950–2022
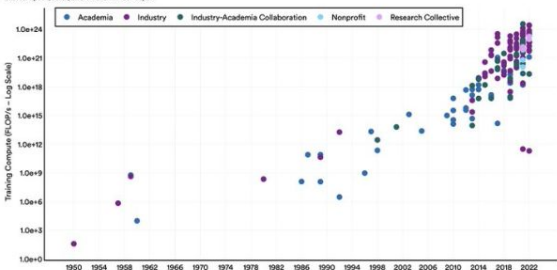Source: Epoch, 2022 | Chart: 2023 AI Index Report

Legend: ● Academia ● Industry ● Industry-Academia Collaboration ● Nonprofit ● Research Collective

Y-axis: Training Compute (FLOP/s – Log Scale)
Y-axis values: 1.0e+24, 1.0e+21, 1.0e+18, 1.0e+15, 1.0e+12, 1.0e+9, 1.0e+6, 1.0e+3, 1.0e+0
X-axis years: 1950, 1954, 1958, 1962, 1966, 1970, 1974, 1978, 1982, 1986, 1990, 1994, 1998, 2002, 2006, 2010, 2014, 2018, 2022

Figure 1.2.11

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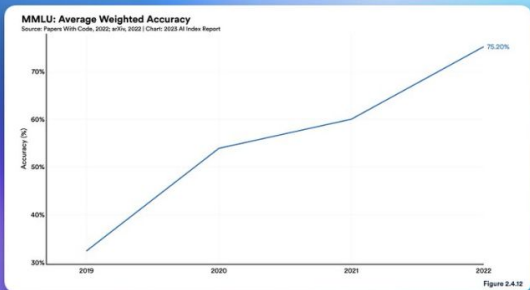**51** Retweets   **6** Quotes   **747** Likes   **21** Bookmarks

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In just 3 years, language models have gotten way more powerful.

This shows performance of language models across subjects like social sciences, humanities, etc.

MMLU: Average Weighted Accuracy
Source: Papers With Code, 2022; arXiv, 2022 | Chart: 2023 AI Index Report

75.20%

Figure 2.4.12

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33 Retweets   **3** Quotes   **563** Likes   **14** Bookmarks

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With great power comes great responsibility.

People are also using these more capable AI models to do questionable things, like deepfaking politicians.

Number of AI Incidents and Controversies, 2012–21
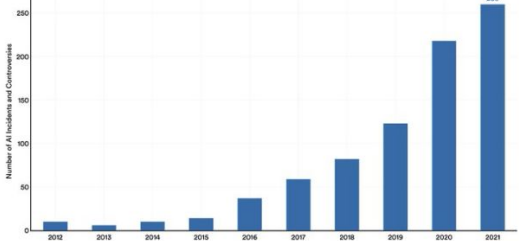Source: AIAAIC Repository, 2022 | Chart: 2023 AI Index Report

Figure 3.2.1

3:07 PM · Apr 3, 2023 · **234.4K** Views

54 Retweets   **5** Quotes   **560** Likes   **17** Bookmarks

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This number is going to continue to skyrocket as the world figures out how to adjust to new AI capabilities.

Notable ones include the outstanding lawsuit against Stability AI for copyright concerns.

Number of AI-Related Legal Cases in the United States, 2000–22
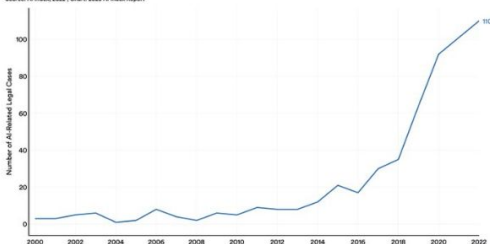Source: AI Index, 2022 | Chart: 2023 AI Index Report

Figure 6.4.1

3:07 PM · Apr 3, 2023 · **220.4K** Views

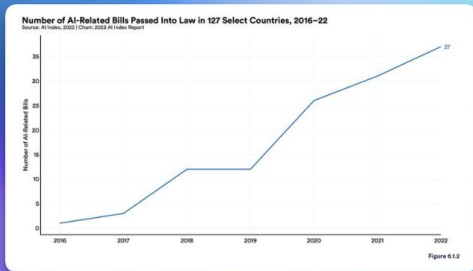**29** Retweets   **6** Quotes   **464** Likes   **8** Bookmarks

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Governments are sprinting to figure out their approach to AI.

Look at the EU. They've been working on their big AI Act for nearly 2 years.

Then ChatGPT comes out and throws a big wrench in their framework. Kneejerk reaction from Italy to ban it.

Number of AI-Related Bills Passed Into Law in 127 Select Countries, 2016–22
Source: AI Index, 2022 | Chart: 2023 AI Index Report

Figure 6.1.2

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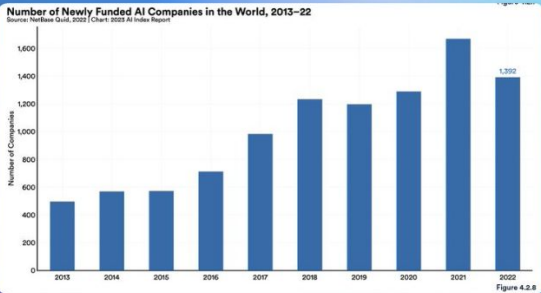@nonmayorpete

Newly funded AI startups has ~tripled in the last 10 years.

57 of 273 companies in the most recent YC batch is doing work with generative AI

Number of Newly Funded AI Companies in the World, 2013–22
Source: NetBase Quid, 2022 | Chart: 2023 AI Index Report

Figure 4.2.8

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34 Retweets **2** Quotes **441** Likes **20** Bookmarks

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You should be in the US if you're starting an AI company

Number of Newly Funded AI Companies by Geographic Area, 2022
Source: NetBase Quid, 2022 | Chart: 2023 AI Index Report

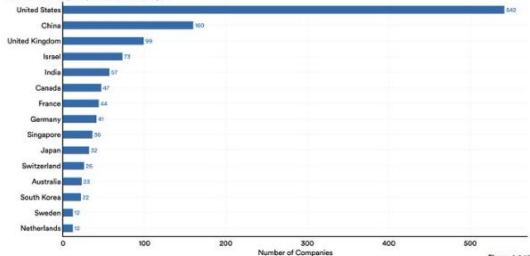| Geographic Area	Number of Companies
United States	542
China	160
United Kingdom	99
Israel	73
India	57
Canada	47
France	44
Germany	41
Singapore	36
Japan	32
Switzerland	26
Australia	23
South Korea	22
Sweden	12
Netherlands	12

Figure 4.2.16

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109 Retweets   **49** Quotes   **770** Likes

It's a good time to have AI-related skills

AI Job Postings (% of All Job Postings) by Geographic Area, 2014–22
Source: Lightcast, 2022 | Chart: 2023 AI Index Report

2.05%, United States
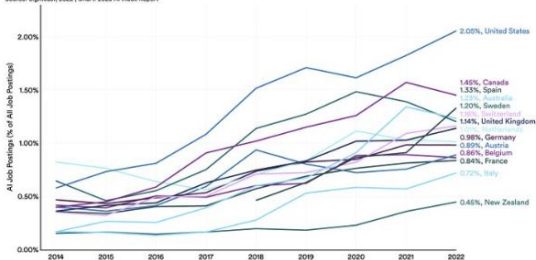1.46%, Canada
1.33%, Spain
1.20%, Sweden
1.13%, Australia
1.10%, Switzerland
1.14%, United Kingdom
0.98%, Germany
0.89%, Austria
0.86%, Belgium
0.84%, France
0.72%, Italy
0.45%, New Zealand

Figure 4.1.1

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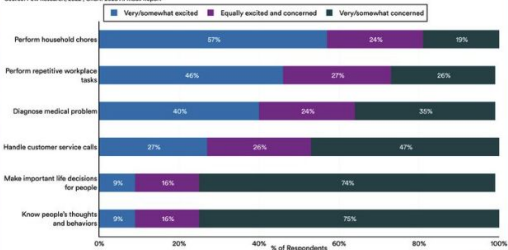
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Soon, the AI tinkerers on Twitter will be building stuff that the average American finds outright terrifying.

That's going to be one hell of a public debate.

Americans' Feelings on Potential AI Applications (% of Total), 2022
Source: Pew Research, 2022 | Chart: 2023 AI Index Report

Legend: ■ Very/somewhat excited ■ Equally excited and concerned ■ Very/somewhat concerned

	Very/somewhat excited	Equally excited and concerned	Very/somewhat concerned
Perform household chores	57%	24%	19%
Perform repetitive workplace tasks	46%	27%	26%
Diagnose medical problem	40%	24%	35%
Handle customer service calls	27%	26%	47%
Make important life decisions for people	9%	16%	74%
Know people's thoughts and behaviors	9%	16%	75%

% of Respondents (0% to 100%)

Figure 8.1.9

2 See Appendix for more details about the survey methodology.
3 The numbers in Figure 8.1.9 may not sum up to 100% due to rounding.

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74 Retweets **13** Quotes **748** Likes **57** Bookmarks

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By comparison, people in China believe in AI's future way more than people in the US

Opinions About AI by Country (% Agreeing With Statement), 2022
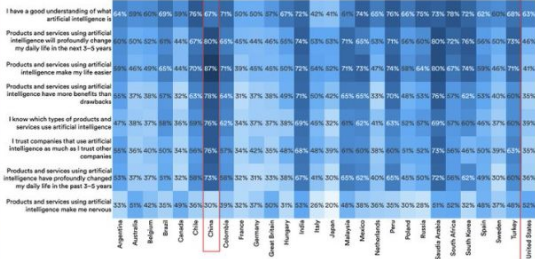Source: IPSOS, 2022 | Chart: 2023 AI Index Report

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71 **Retweets**   26 **Quotes**   609 **Likes**

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Thanks for reading! If you found this post helpful, follow me for more insights on AI.