

Trends in AI

Kellogg MBAi Guest Lecture
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thealliance.ai

A photograph of a concrete pier with a metal railing overlooking a body of water. The pier is made of light-colored concrete and has a dark metal railing with vertical bars. The water is a calm, light blue-grey color. The sky is a pale, overcast blue. The foreground shows the textured surface of the pier, which appears to be covered in a layer of greenish-grey algae or moss.

Trends:

- The AI Alliance - why?
- Should AI be “open” or “closed”?
- Interesting model trends
- Legal considerations

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The AI Alliance

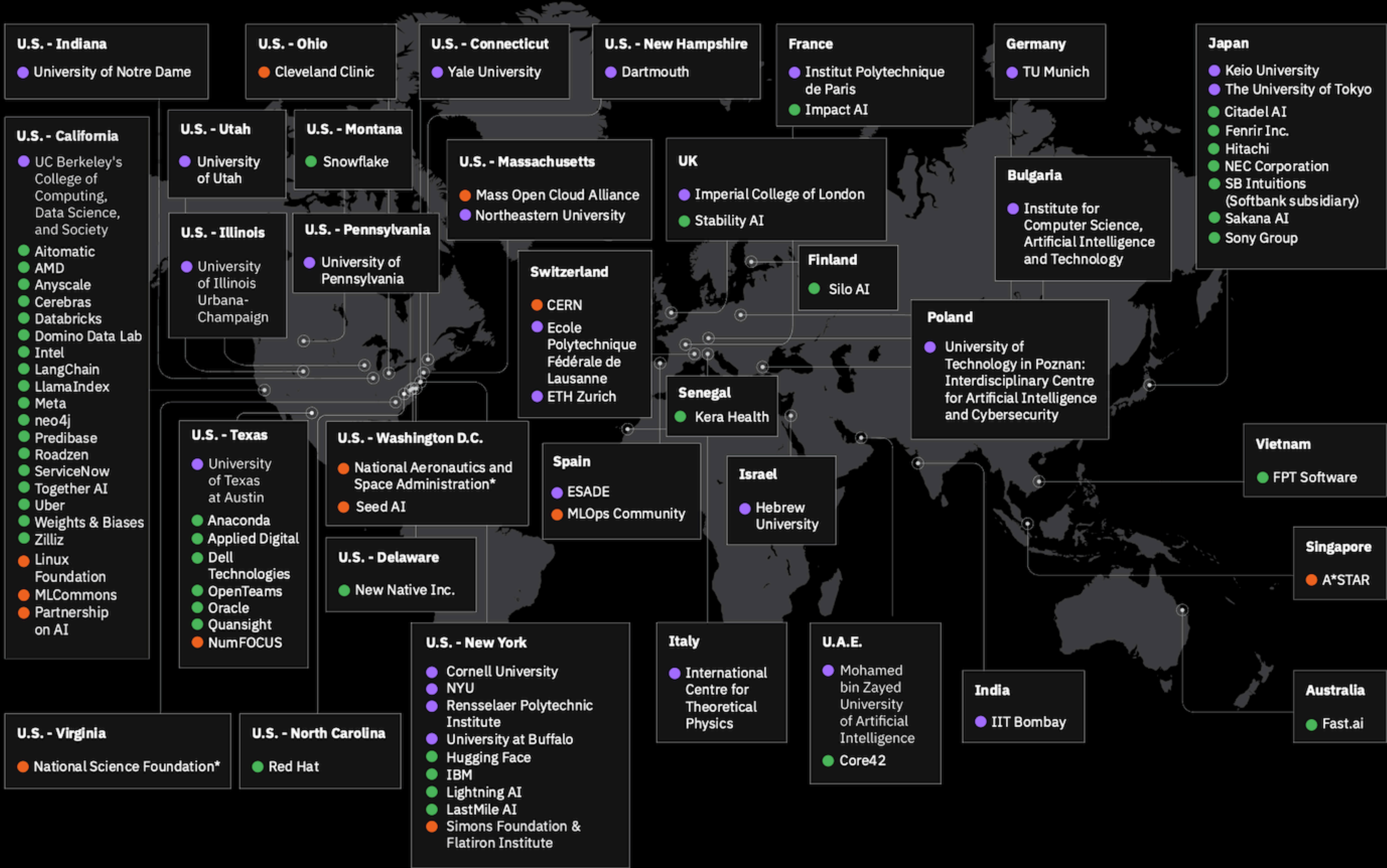
A community of technology creators, developers and adopters collaborating to advance safe, responsible AI rooted in open innovation.

Learn more



Meet the AI Alliance

thealliance.ai



Founding Members and Collaborators*

- Universities
 - Startups & Enterprises
 - Science Organizations & Non-profits
- ~80

Total annual R&D funding represented

>\$80B

Students supported by these academic institutions

>400,000

Total staff members

>1,000,000

Meet the AI Alliance

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Six Focus Areas:

1. Education, skills building, and research
2. Trust and safety
3. Tools for building models and applications
4. Hardware portability
5. Open models and datasets
6. Policy and regulations

Spreading knowledge

Technical developments

Maximize access, with safety

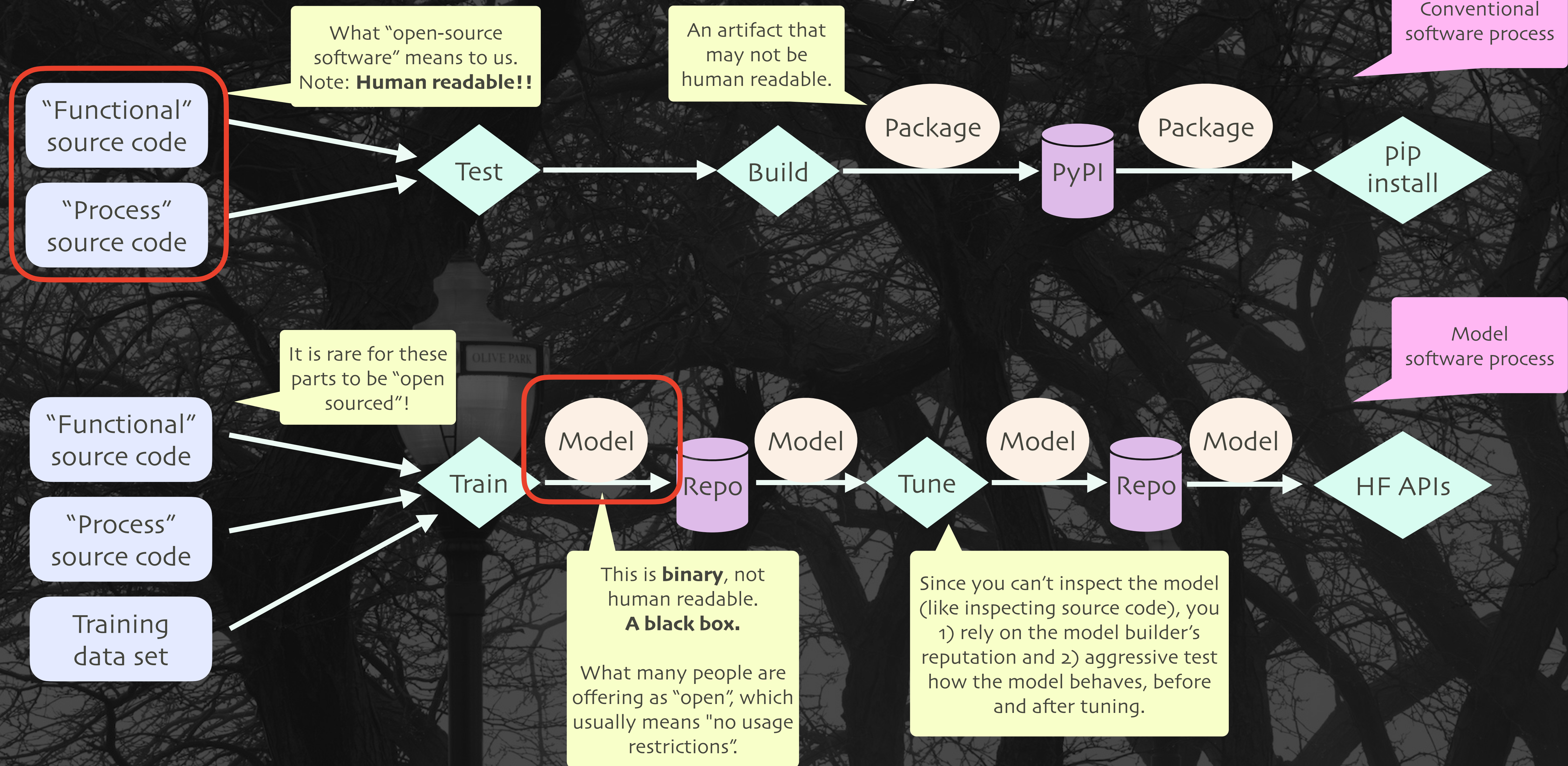
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Should AI be “open” or “closed”?



First, what does open mean??



Why Open (as Much as Possible)?

- Free to use as you see fit without undo restrictions.
- Free to innovate in new ways.
- Easier to inspect for bugs, security flaws.
- For data, easier to see if “bad” data is present.

Do we want an essential technology controlled by a few, well-capitalized organizations or more widely available?

Interesting Model Trends

- One size does not fit all. In 2023 we learned useful model size tradeoffs:
 - Big models:
 - ✓ More generalizable
 - ✓ Highest benchmark scores
 - ✗ Much higher costs, carbon footprint
 - Small models:
 - ✗ Less generalizable
 - ✓ Easy to tune to be very good for specific applications
 - ✓ Much lower costs, carbon footprint

Interesting Model Trends

- Mixture of Experts
 - Several smaller, cheaper models combine to match performance of one large model
- Better, easier ways to “tune” models
 - and combine them application patterns like “RAG”, etc.

Few organizations will train models from scratch. Instead, they will start with a good open model and tune it for their needs.



Legal Considerations

Question:

- Is it fair use to train with copyrighted data?
- Some legal experts say, it IS fair use, like you reading the NY Times, WSJ, a book, etc.
- What matters is how you acquire and quote the information!

The Times Sues OpenAI and Microsoft Over A.I. Use of Copyrighted Work

Millions of articles from The New York Times were used to train chatbots that now compete with it, the lawsuit said.



Share full article



1.3K

Question:

- Can AI-generated content be copyrighted?
- "..., in the United States, copyright laws do not protect works created solely by a machine. But if an individual can demonstrate substantial human involvement in its creation, then it is plausible they may receive copyright protection."
- BUT, if training is treated like a human activity, shouldn't creating also be treated this way?

Thank you!

- Visit thealliance.ai
 - (Join our mailing list: see the “learn more” page)
- Let me know what you think!
 - dean.wampler@ibm.com
 - Mastodon and Bluesky: @deanwampler
 - Other talks: deanwampler.com/talks

Extra Slides



Meet the AI Alliance

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- More on the Six Focus Areas:
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 2. Trust and safety
 3. Tools for building models and applications
 4. Hardware portability
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More on the Six Focus Areas:

- 1. Education, skills building, and research
- 1. So everyone can understand how to use AI safely.
- 2. Ensure researchers have access to GPUs to keep advancing AI.

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- 2. Trust and safety
- 1. What are all the potential risks?
- 2. How do we mitigate them?
- 3. How do users choose models that meet their safety requirements?

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- 2. Trust and safety
- 3. Tools for building models and applications
 - 1. How do we make tuning easier?
 - 2. What's next after RAG?

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1. NVIDIA GPUs are expensive and hard to get

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1. Models and datasets for every scenario

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1. Discussed later...

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