

Berkeley

Center for  
Decentralization



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## A Decentralization Perspective

### Session I: Open Source AI

#### What Issues Are Blocking AI Adoption? A Decentralization Perspective

**Dean Wampler**

Head of Technology for the AI Alliance  
IBM Research



# Berkeley Issues Blocking AI Adoption: A Decentralization Perspective

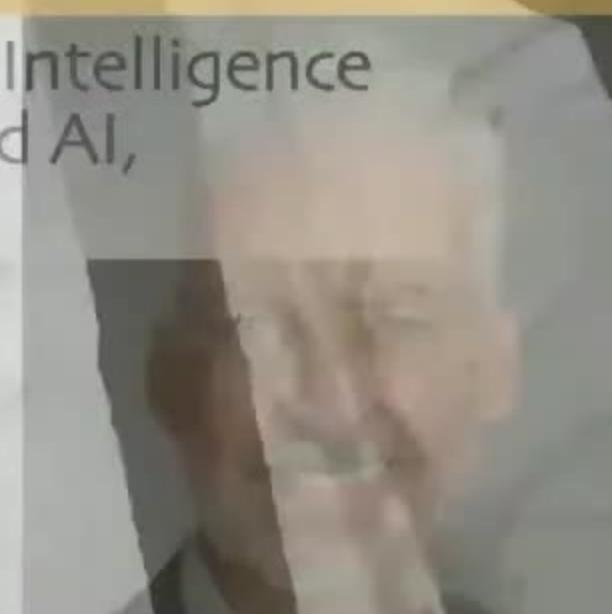
Summit on Responsible Decentralized Intelligence  
**What Issues Are Blocking Decentralization and AI,  
Decentralization Perspective**

Dean Wampler, Ph.D.

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# Issues Blocking AI Adoption: A Decentralization Perspective

Summit on Responsible Decentralized Intelligence  
- Future of Decentralization and AI,  
NYC August 6, 2024

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- Should AI Be “Open” or “Closed”?
  - The AI Alliance
  - “Alignment” Issues Blocking AI Adoption
  - Decentralization Solutions



Should AI be  
“open” or “closed”?

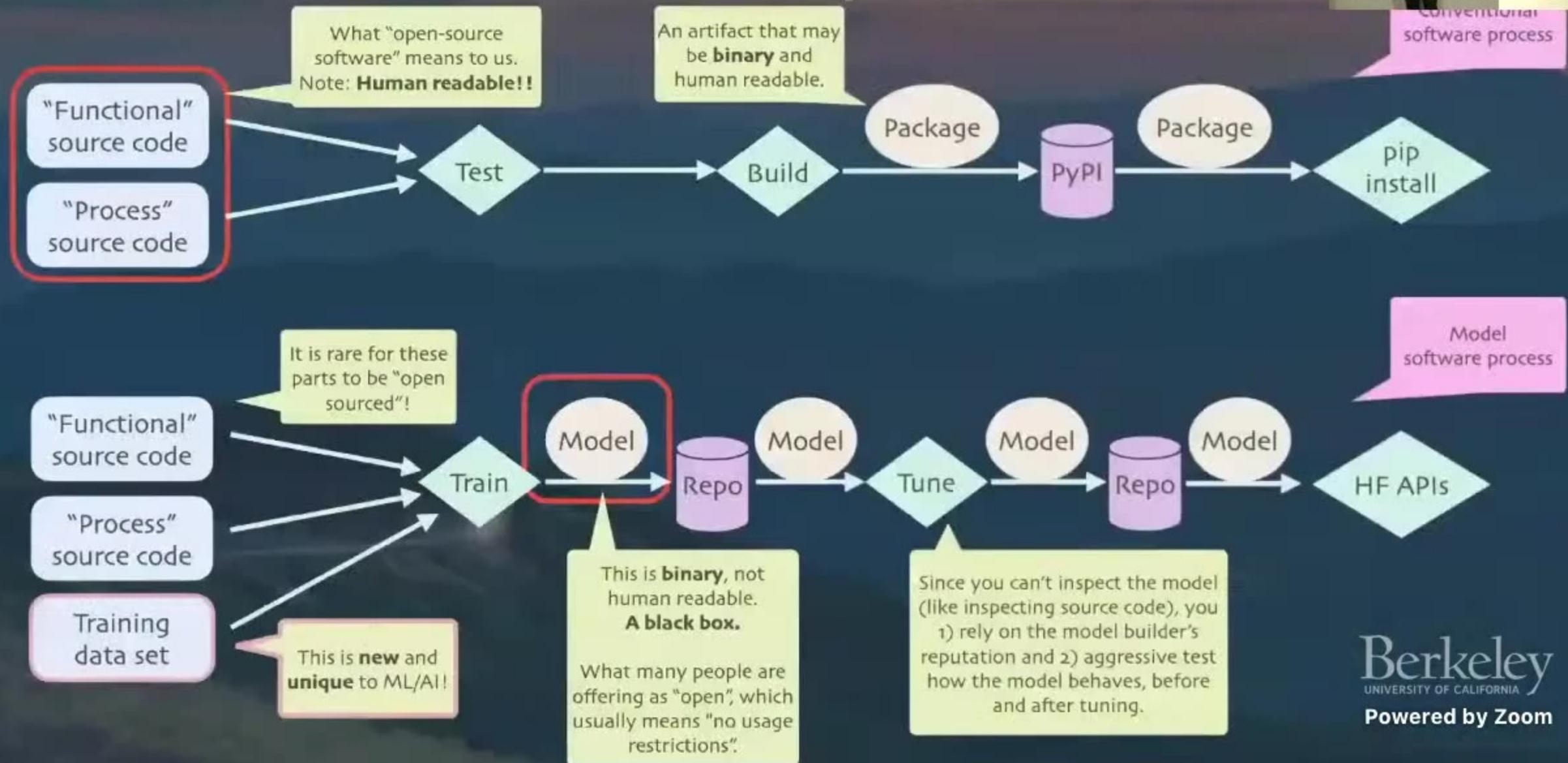
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# Should AI be “open” or “closed”?

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# First, what does open mean??



# Why Open (as Much as Possible)



- “The benefits can be summarized as autonomy, transparency, frictionless reuse, and collaborative improvement.”
- Although it is common to go from proprietary to open:
  - E.g., Windows/Unix/MacOS → Linux

Do we want AI technology controlled  
by a few entities or more widely available?

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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.

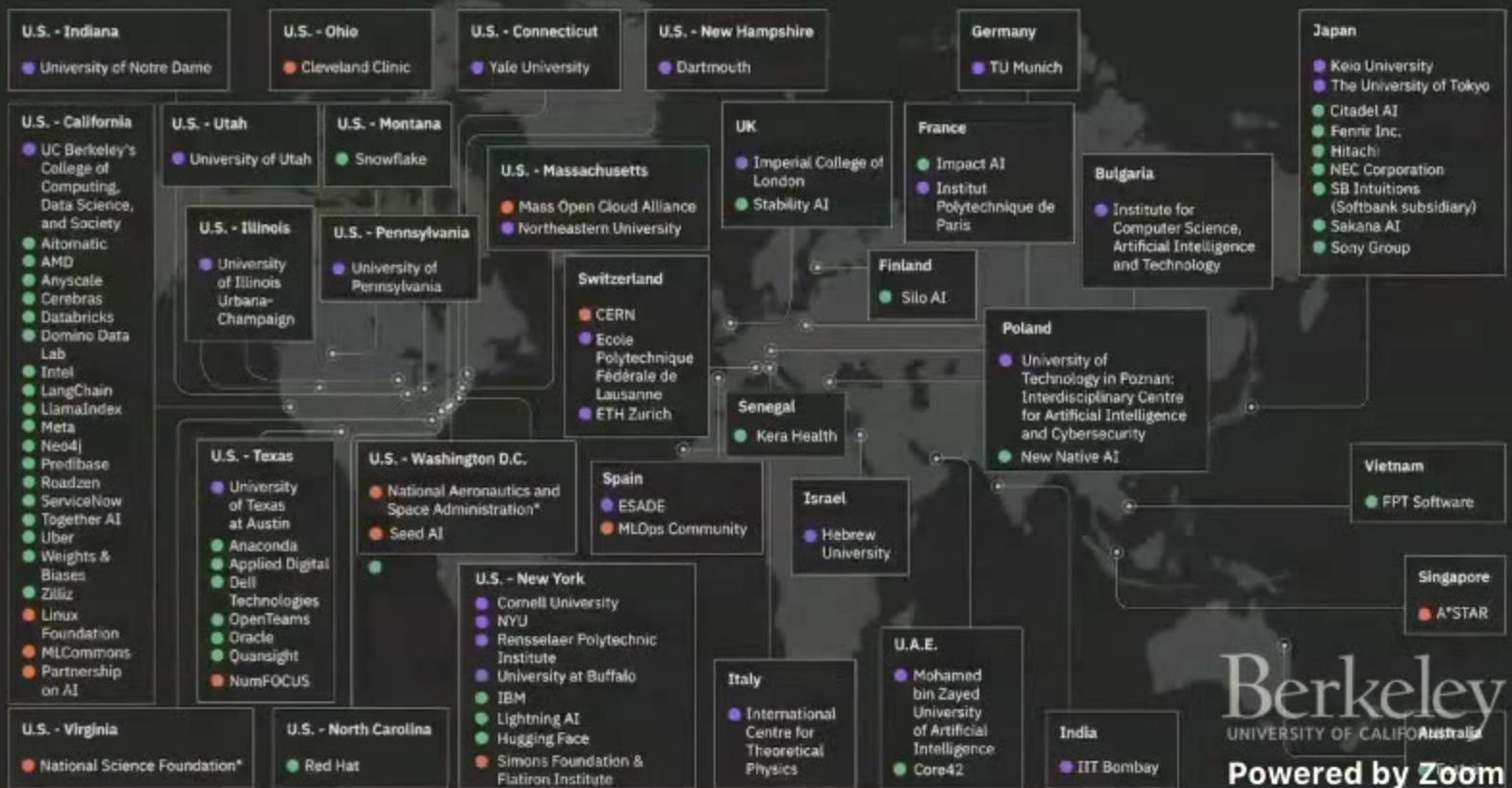


Diagram as of  
February.  
>110 Now

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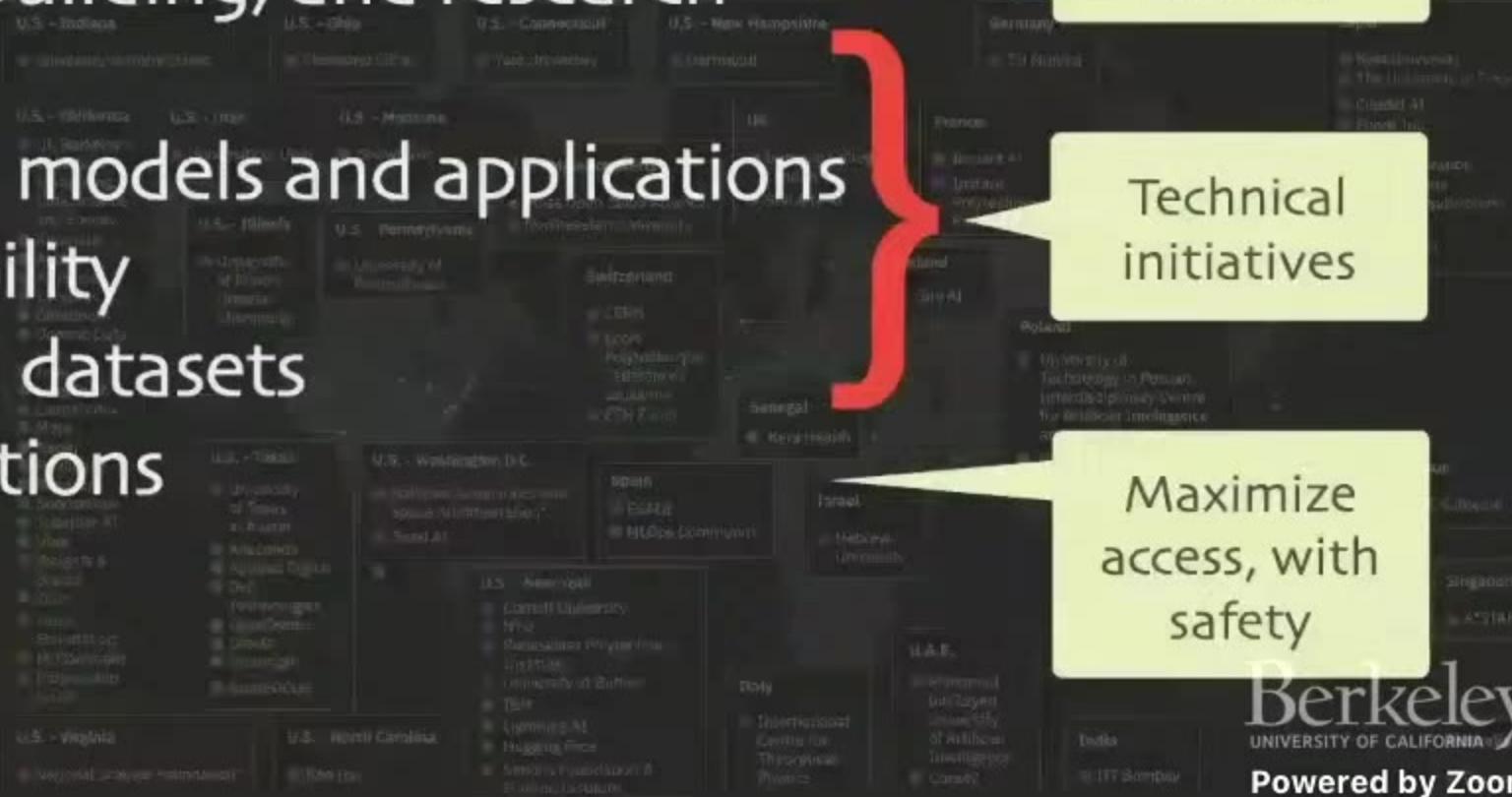


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# The AI Alliance

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

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



How can  
decentralization help?

# "Alignment" Is locking AI Adoption

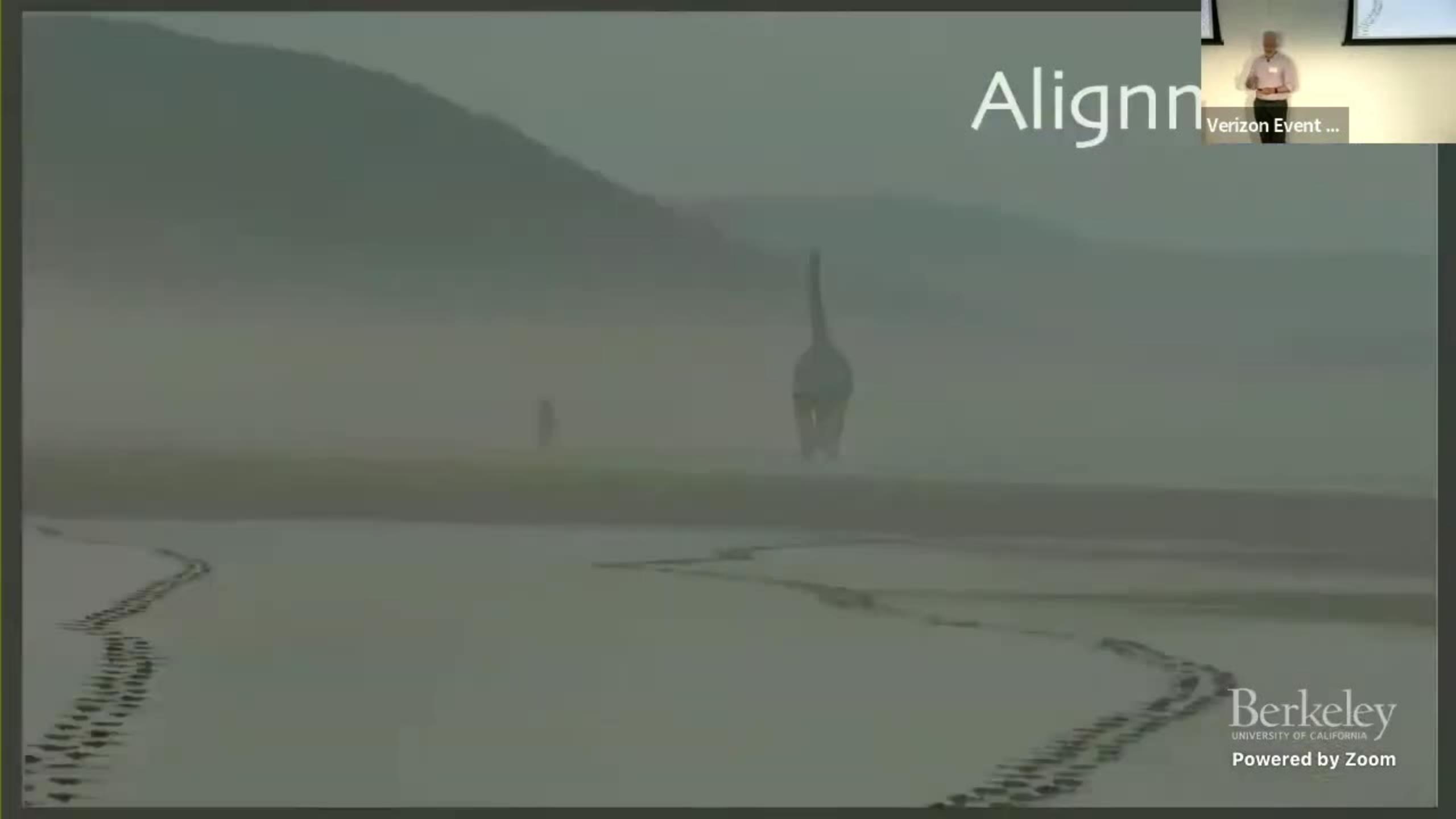
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# Alignn

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# Alignn

Alignment - Assuring that the model or AI application works as intended, i.e., that the results satisfy requirements for:

- Usefulness for user goals
- Secure
- Free of bias
- Free of objectionable speech and concepts
- Free of copyrighted material
- Factually correct, i.e., free of hallucinations

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Alignment is the hardest problem blocking broader adoption of Gen AI.

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# Decentralized



- Federated Learning:
  - Align models to local “requirements” (e.g., your face) while preserving privacy
  - Distribute the compute overhead
- Distributed Ledgers:
  - Secure the data supply chain for training, tuning, and inference

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Governance of the supply chain:  
While most AI users currently accept “open” models with opaque training data lineage, that will likely change.

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# What Actually W



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**Dare Obasanjo**

@carnage4life@mas.to

There is a big difference between tech as augmentation versus automation.

Augmentation (think Excel and accountants) benefits workers while automation (think traffic lights versus traffic wardens) benefits capital.

LLMs are controversial because the tech is best at augmentation but is being sold by lots of vendors as automation.

Jun 10, 2024 at 10:31 · Ivory for iOS · 112 · 181



<https://mas.to/@carnage4life/112593042823322764>

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# Emphasize Augmentation

- Keep humans in the loop, but improve productivity:
  - Distilling information more quickly
  - Translating between human and “domain languages”
    - SQL, Python, but also domain jargon (medical, finance, science, ...)
  - Use complementary tools
    - Use deterministic tools for factual accuracy, logical reasoning, and planning
    - What Agent frameworks enable



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*A.I. Needs Copper. It Just Helped to Find Millions of Tons of It.*

An exploration site run by KoBold Metals in Chililabombwe, Zambia, in June. Zinyange Auntony / The New York Times

Train model with geological and mining data to predict where the copper is likely to be

The deposit, in Zambia, could make billions for Silicon Valley, provide minerals for the energy transition and help the United States in its rivalry with China.

<https://www.nytimes.com/2024/07/11/climate/kobold-zambia-copper-ai-mining.html>

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# Thank You!

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- Visit [thealliance.ai](https://thealliance.ai)
- Let me know what you think!
  - [dwampler@thealliance.ai](mailto:dwampler@thealliance.ai)
  - Mastodon and Bluesky: @deanwampler
  - Other talks: [deanwampler.com/talks](https://deanwampler.com/talks): use this ➔

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Berkeley Center for Responsible  
Decentralized Intelligence

# **Summit on Responsible Decentralized Intelligence — Future of Decentralization and AI**

August 6, 2024  
Verizon Center, NYC

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Moderator

Panellists

Berkeley

Center for Responsible,  
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Sam Bronner

Executive Director  
Berkeley Center for  
Decentralized Intelligence

Sasha

Associate Director  
Berkeley Center for  
Decentralized Intelligence

August 6, 2024

Verizon Center, NYC

Dean Wampler

President, Verizon Media  
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## Panel: Open Source vs. Closed Source; What's Needed to Make Open Source Win

### Moderator



**Sam Broner**

Investment Partner,  
a16z crypto

### Panelists



**Sasha Rush**

Associate Professor,  
Cornell Tech;  
Hugging Face



**Mala Kumar**

Director of Program  
Management, AI  
Safety, MLCommons



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