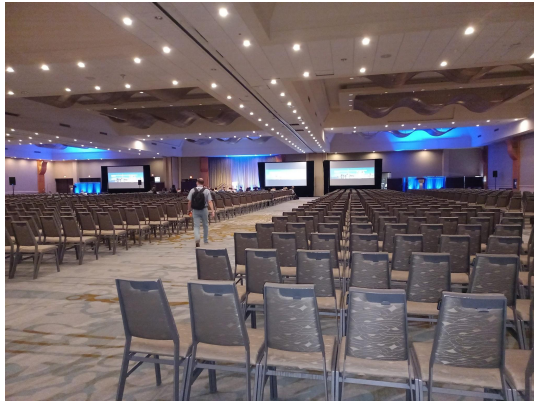
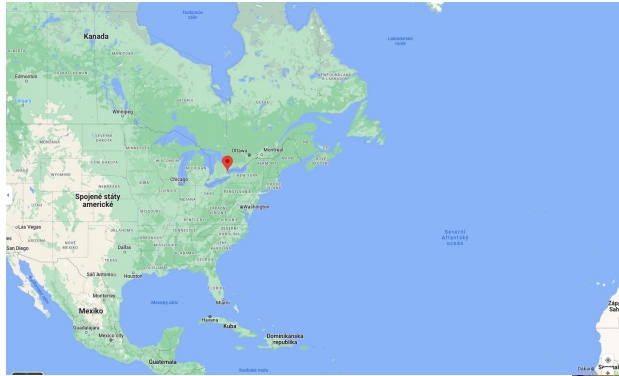


# ACL 2023 for Hejnice 2023

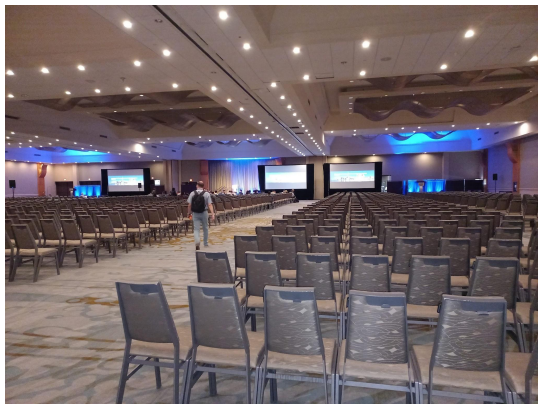
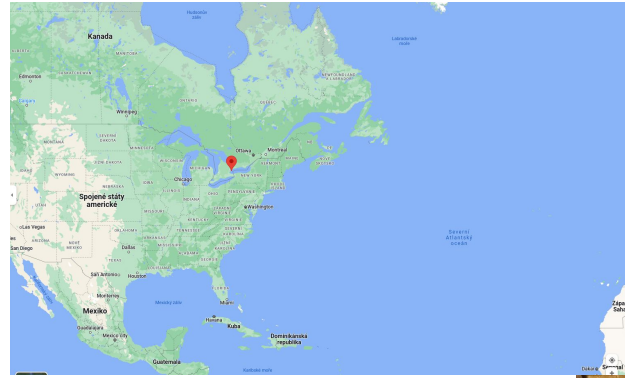


Charles University  
Faculty of Mathematics and Physics  
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unless otherwise stated

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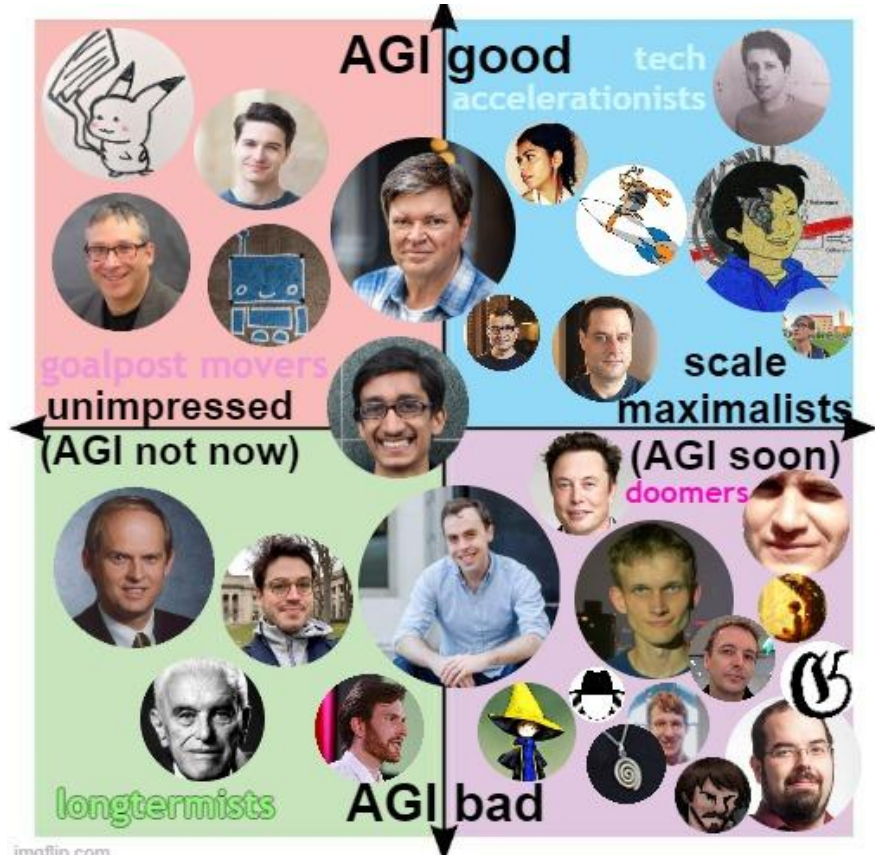


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# Presidential Address


- ACL acceptance rate: 20.73%
- Long: 22.13%
- Short: ~15%
- Demos: ~37%
- Submission countries: 1. China 2. USA
- ACL 2024 will be ARR only

# Keynote Talks - Background




@MichaelTrazzi. (2022, Jun 09). ok doomer. [Twitter post]. Retrieved from <https://twitter.com/MichaelTrazzi/status/1534927524630863873>

# Keynote Talks

 <b>GEOFFREY HINTON</b> Professor, University of Toronto	
Is the success of GPT-4 and today's other large language models a sign that an AGI is likely?	Yes
Is an AGI likely to cause civilizational disaster if we do nothing?	Maybe
Core belief about the future of large language models	LLM technology is advancing too rapidly; it shouldn't advance any further until scientists are confident that they can control it.
Quote	<b><u>"Until quite recently, I thought it was going to be like 20 to 50 years before we have general-purpose AI. And now I think it may be 20 years or less."</u></b>
Photo: University of Toronto	


Eliza Strickland and Glenn Zorpette. (2023) The AI apocalypse: A scoreboard, *IEEE Spectrum*, 21 Jun. Retrieved from: <https://spectrum.ieee.org/artificial-general-intelligence>


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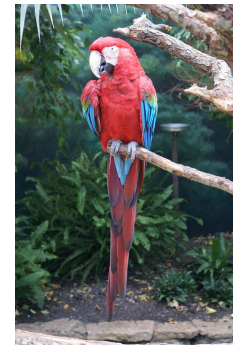
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<b>Core belief about the future of large language models</b>	Powerful corporations' hype about LLMs and their progress toward AGI create a narrative that distracts from the need for regulations that protect people from these corporations.
<b>Quote</b>	<u>"We can imagine other futures, but to do so, we have to maintain independence from the narrative being pushed by those who believe that AGI is desirable and that LLMs are the path to it."</u>
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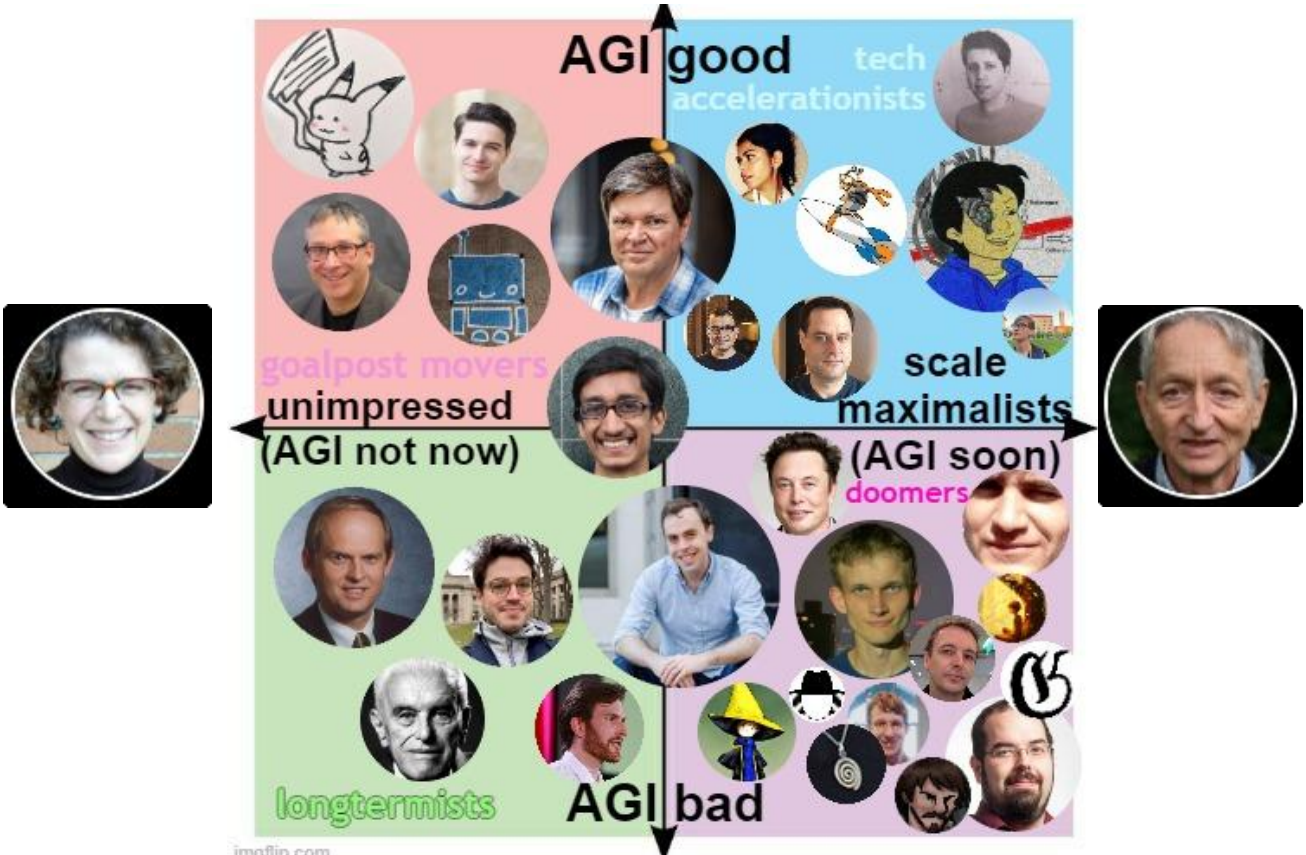
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## An example of understanding by GPT-4

(a more complicated version of a question suggested by Hector Levesque)

GE

The rooms in my house are painted white or yellow or blue. Yellow paint fades to white within a year. In two years time I want all the rooms to be white. What should I do and why?

what I think of as an old fashioned  
symbolic AI guy, but he's very honest

# Keynote Talks - prof. Geoffrey Hinton



If you want all rooms in your house to be white in two years' time, the actions you should take depend on the current colors of the rooms:

1. White rooms: You don't need to do anything with these rooms as they are already white.
2. Yellow rooms: Since yellow paint fades to white within a year, you won't have to do anything for these rooms either.
3. Blue rooms: The problem arises here. You will need to paint these rooms white. Assuming the blue paint doesn't fade or change color over time, the only way to make them white is to paint over the existing color.

**understanding the question. It has to have understood what was said, people**

# Keynote Talks - prof. Geoffrey Hinton

- "It said, 'You should paint all the blue rooms yellow. That's not the natural solution, but it works. That's pretty impressive common-sense reasoning that's been very hard to do using symbolic AI because you have to understand what fades means and you have to understand bitemporal stuff. So, they're doing sensible reasoning with an IQ of like 80 or 90.'" (this exact quote from <https://www.computerworld.com/article/3695568/qa-googles-geoffrey-hinton-humanity-just-a-passing-phase-in-the-evolution-of-intelligence.html>)

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- "They should not be called hallucinations, they should be called confabulations."
- "LLMs confabulate. People confabulate all the time."
- "But isn't it just predicting the next using statistical word co-occurrences? It's just statistics. No, that's not what's happening. It's not just statistics."

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Prof. Emily Bender: "What do you mean if you say a computer understands a question and how do you test that in a robust way?"

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  - etc.
- about ½ papers prompt LLMs
- ICL = In Context Learning
  - **ICL** in simple terms is the ability to learn from analogy. It only takes a few examples in a demonstration for the model to make a prediction. (from Towards Data Science: <https://towardsdatascience.com/all-you-need-to-know-about-in-context-learning-55bde1180610>)

# Fun Session: Reality Checks

- **Credible Without Credit** Peskoff and Stewart, 2023
  - Are ChatGPT and YouChat reliable? They asked questions and had domain experts rate the answers.
  - 0/10 experts recommended YouChat for professional use. 3/10 experts recommended ChatGPT for general purpose.
  - <https://aclanthology.org/2023.acl-short.37.pdf>

# Lifetime Achievement Award

- Prof. Martha Palmer
- For tremendous contributions to NLP, multilingual resources, and supervised ML in lexical-semantic processing
- Gave a fantastic life time achievement award talk
- “In my linguist hat, LLMs are a treasure trove!”
- “We have the best jobs in the world.”



Prof. Emily Bender's keynote talk: Data Statements

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A data statement is a characterization of a dataset that provides context to allow developers and users to better understand how experimental results might generalize, how software might be appropriately deployed, and what biases might be reflected in systems built on the software. In developing and writing your data statement, keep in mind that someone new to your dataset might be reading your data statement 10 or 20 years from now.

Alternatively, at some point in the future, you might find yourself looking back at your data and reading your data statement to recall key characteristics and decisions.

(<https://github.com/TechPolicyLab/Data-Statements/blob/main/template-v2.md>)

# Linguistic Annotation Workshop @ ACL

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Google Doc link with complete notes is in your mailboxes. Thanks for your attention!

