

How generative Al is impacting higher education in the US and globally



Rob NelsonUniversity of Pennsylvania







Bluepulse Survey Questions

- When you consider the recent breakthroughs in generative AI like ChatGPT, what do you see as the biggest threats to your institution or MENA intuitions generally?
- When you consider the recent breakthroughs in generative AI like ChatGPT, what do you see as the most important opportunities for your institution or MENA intuitions generally?







Introducing ChatGPT

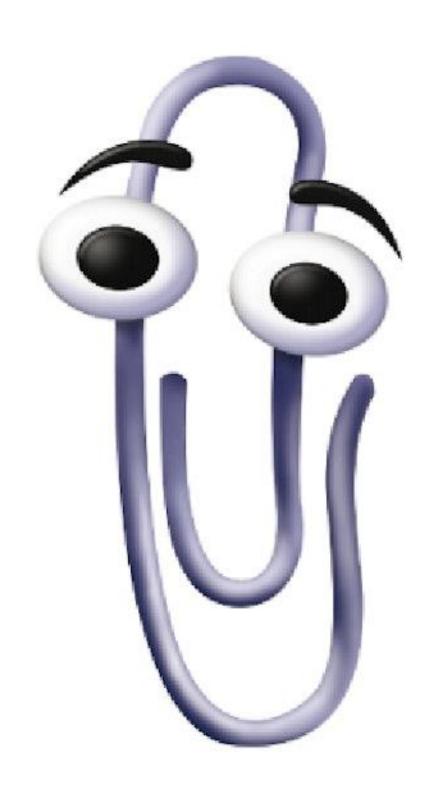
We've trained a model called ChatGPT which interacts in a conversational way. The dialogue format makes it possible for ChatGPT to answer followup questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests.

Try ChatGPT ↗

Read about ChatGPT Plus

Talk to Eliza by typing your questions and answers in the input box.

>	Hello,	Ι	am	Eliza.	I'11	be	your	therapist	today.
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The College | Teachers are on alert for inevitable cheating after release of ChatGPT

Nobody is prepared for h ChatGPT offers a glimpse at a future in which computer-generated answers may be undetectable

Al is finally good at stuff, and that's a problem

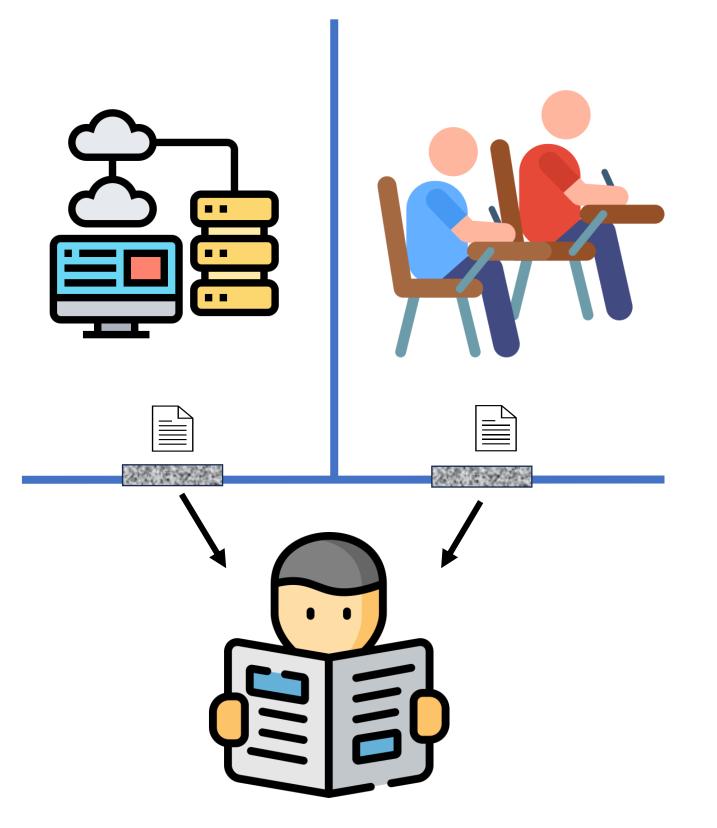
Here's why you've been hearing so much about ChatGPT.

Teachers are concerned about cheating and inaccurate information

Professor catches student cheating with ChatGPT: 'I feel abject terror'

ded by what

CHARTEL CALL PROQUEC.



Turing Test

"Computing machinery and intelligence?"1950

If the evaluator cannot reliably tell the machine text from the human text, the machine has passed the test.

nature

NEWS FEATURE | 25 July 2023

ChatGPT broke the Turing test — the race is on for new ways to assess AI

Large language models mimic human chatter, but scientists disagree on their ability to reason.

ChatGPT revealed two problems

- We don't have a way to tell if written work was produced by a human, a machine, or by some combination of the two.
- We don't have an agreed upon way to assess how close we are getting to creating artificial general intelligence.







Eliza Effect

The tendency to project human traits—
such as experience, comprehension or
empathy—into computer programs that
have a text-based interface.

On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? 🦜

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ABSTRACT

The past 3 years of work in NLP have been characterized by the development and deployment of ever larger language models, especially for English. BERT, its variants, GPT-2/3, and others, most recently Switch-C, have pushed the boundaries of the possible both through architectural innovations and through sheer size. Using these pretrained models and the methodology of fine-tuning them for specific tasks, researchers have extended the state of the art

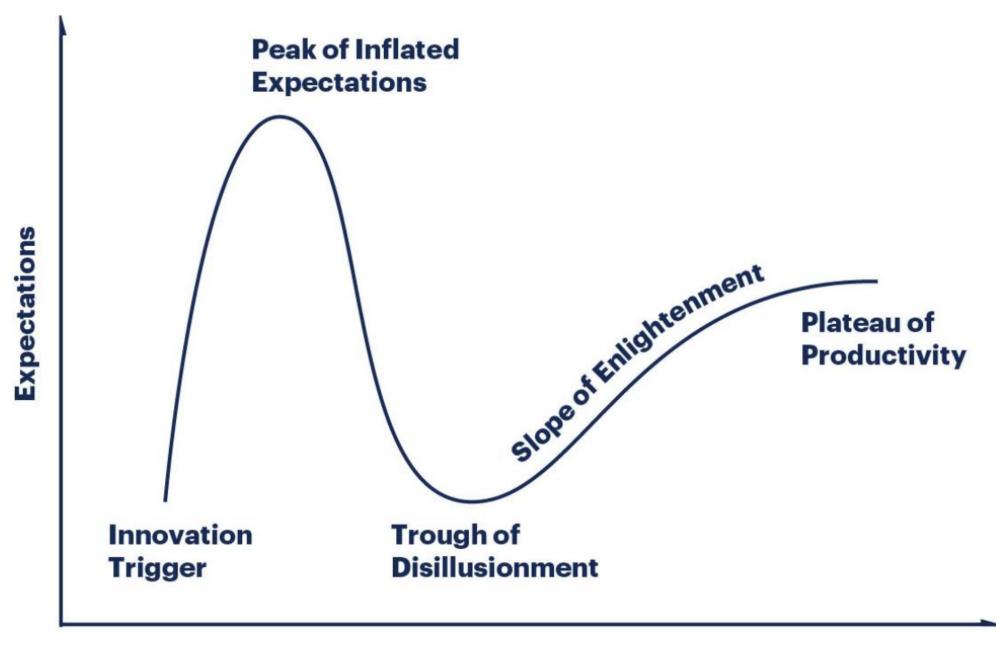
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alone, we have seen the emergence of BERT and its variants [39, 70, 74, 113, 146], GPT-2 [106], T-NLG [112], GPT-3 [25], and most recently Switch-C [43], with institutions seemingly competing to produce ever larger LMs. While investigating properties of LMs and how they change with size holds scientific interest, and large LMs have shown improvements on various tasks (§2), we ask whether enough thought has been put into the potential risks associated with developing them and strategies to mitigate these risks.

I can make words that sound like human speech but I do not understand the words or the social contexts in which they are used.





Time

Gartner's hype cycle

Coca-Cola Y3000



New from Coca-Cola® Creations, look into the year 3000 with Coca-Cola® Y3000 the first limited-edition Coke flavor from the future. Created to show us an optimistic vision of what's to come, where humanity and technology are more connected than ever. For the first time, Coca-Cola® Y3000 was co-created with artificial intelligence to help bring the flavor of tomorrow to Coke fans. Taste the Future now. Coca-Cola® Y3000 will be available for a limited time only, so pick up a Coca-Cola® Y3000 and get a glimpse into the future world.

AI Snake Oil

A sneak peek into the book

What makes AI click, what makes it snake oil, and how to tell the difference



SAYASH KAPOOR AND ARVIND NARAYANAN AUG 25, 2022





Share







Predictive Optimization

refers to automated decision-making systems where machine learning is used to make predictions about some future outcome pertaining to individuals, and those predictions are used to make decisions about them.

FAIL TALE

She Was Falsely Accused of Cheating With AI – And She Won't Be the Last

UC Davis student Louise Stivers became the victim of her college's attempts to root out essays and exams completed by chat bots

Machine Learning

Al Detection Tools Falsely Accuse International Students of Cheating

Stanford study found AI detectors are biased against non-native English speakers

A professor accused his class of using ChatGPT, putting diplomas in jeopardy

Al-generated writing is almost impossible to detect and tensions erupting at a Texas university expose the difficulties facing educators

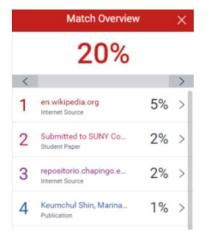
What to do when you're accused of AI cheating

Al detectors like Turnitin and GPTZero suffer from false positives that can accuse innocent students of cheating. Here's the advice of academics, Al scientists and students on how to deal with it.

he majestic blue whale, the goliath of the sea, certainly stands alone within the animal kingdom for its adaptations beyond its massive size. At 30 metres (98 ft) in length and 190 tonnes (210 short tons) or more in weight, it is the largest existing animal and the heaviest that has ever existed. Despite their incomparable mass, aggressive hunting in the 1900s by whalers seeking whale oil drove them to the brink of extinction. But there are other reasons for why they are now so endangered.

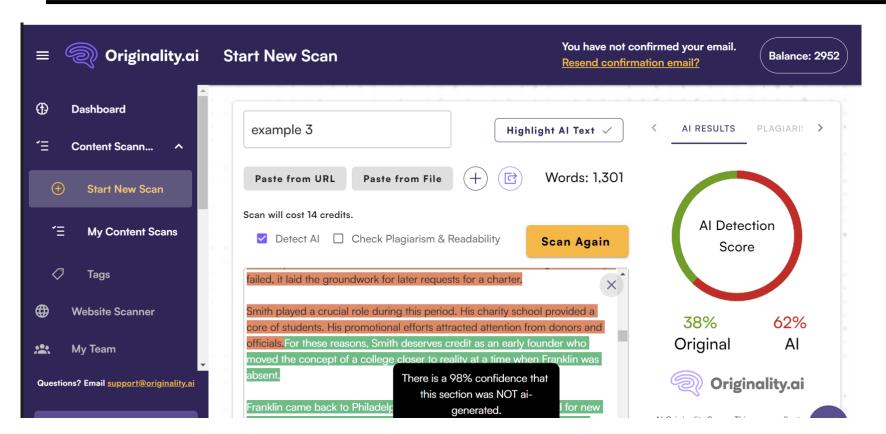






Plagiarism

set of words were found in a previously published work.



AI

on patterns in texts produced by LLMs.



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ChatGPT gave us two tasks

- Assess claims about what generative Al tools can and can't do.
- **2** Consider the social impacts of generative Al products and services.





What's next?

Will the hype will turn to disillusionment?

- Will Google's large foundational model, Gemini displace GPT as the leading model?
- Will we see large-scale adoption of enterprise approaches like University of Michigan's use of Azure OpenAl Service?





Global impacts?

 How limited are the largest foundational models in social and educational contexts outside North America?

How good will LLMs become at translating between English and non-European I

How will Foundational Models trained in languages other than English impact ed





The Ghost in the Machine has an American accent: value conflict in GPT-3.

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ABSTRACT

The alignment problem in the context of large language models must consider the plurality of human values in our world. Whilst there are many resonant and overlapping values amongst the world's cultures, there are also many conflicting, yet equally valid, values. It is important to observe which cultural values a model exhibits, particularly when there is a value conflict between input prompts and generated outputs. We discuss how the co-

The value alignment problem is one of the more difficult areas of the field of ethical AI, but also the most critical[8, 9]. When attempting to limn our desired ethical alignment, many questions quickly arise, including, whose value is the right one? What type of normative ethics do we want to embrace to contextualise our value goals: deontological, consequentialism, or virtue ethics? Which value systems are the right ones for the time, place, and use-case of the model? How can we ensure that we don't calcify our current dominant values into our AI models in a way that may hinder the future ethical development.



176B params 59 languages Open-access

Introducing The World's Largest Open Multilingual Language Model: BLOOM

Large language models (LLMs) have made a significant impact on AI research. These powerful, general models can take on a wide variety of new language tasks from a user's instructions. However, academia, nonprofits and smaller companies' research labs find it difficult to create, study, or even use LLMs as only a few industrial labs

Why Japan is building its own version of ChatGPT

Some Japanese researchers feel that AI systems trained on foreign languages cannot grasp the intricacies of Japanese language and culture.



Jais



Jais is the world's most advanced open-source Arabic Large Language Model (LLM). Developed in the UAE, Jais is the result of a collaboration between Inception, a G42 company focused on expanding the boundaries of AI, Mohamed bin Zayed University of Artificial Intelligence (MBZUAI) -- the world's first graduate-research university dedicated to AI -- and Cerebras Systems.



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