

Critical AI Literacy An Evolving Project

Lauren M.E. Goodlad Critical AI @ Rutgers

Prometheus Carrying Fire, Jan Cossiers c. 1638

#### TECHNOLOGY

## The End of High-School English

I've been teaching English for 12 years, and I'm astounded by what ChatGPT can produce.

By Daniel Herman

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I've been teaching English for 12 years, and I'm astounded by what ChatGPT can produce.

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## Really, Atlantic Monthly?



Google CEO Sundar Pichai made \$226 million last year...

Bill Gates says A.I. chatbots will teach kids to read within 18 months: You'll be 'stunned by how it helps'

om Huddleston Jr. SHAI



TECH • ARTIFICIAL INTELLIGENCE

Exclusive: OpenAI Lobbied the E.U. to Water

Down AI Regulation

AI FEVER

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### Tech Giants Are Barreling Headfirst Into an AI Arms Race

# Satya Nadella wants to make Google dance in battle for AI chat-powered web search

Plus: Publisher using AI tools generated false health advice for men; how ChatGPT widens economic inequalities

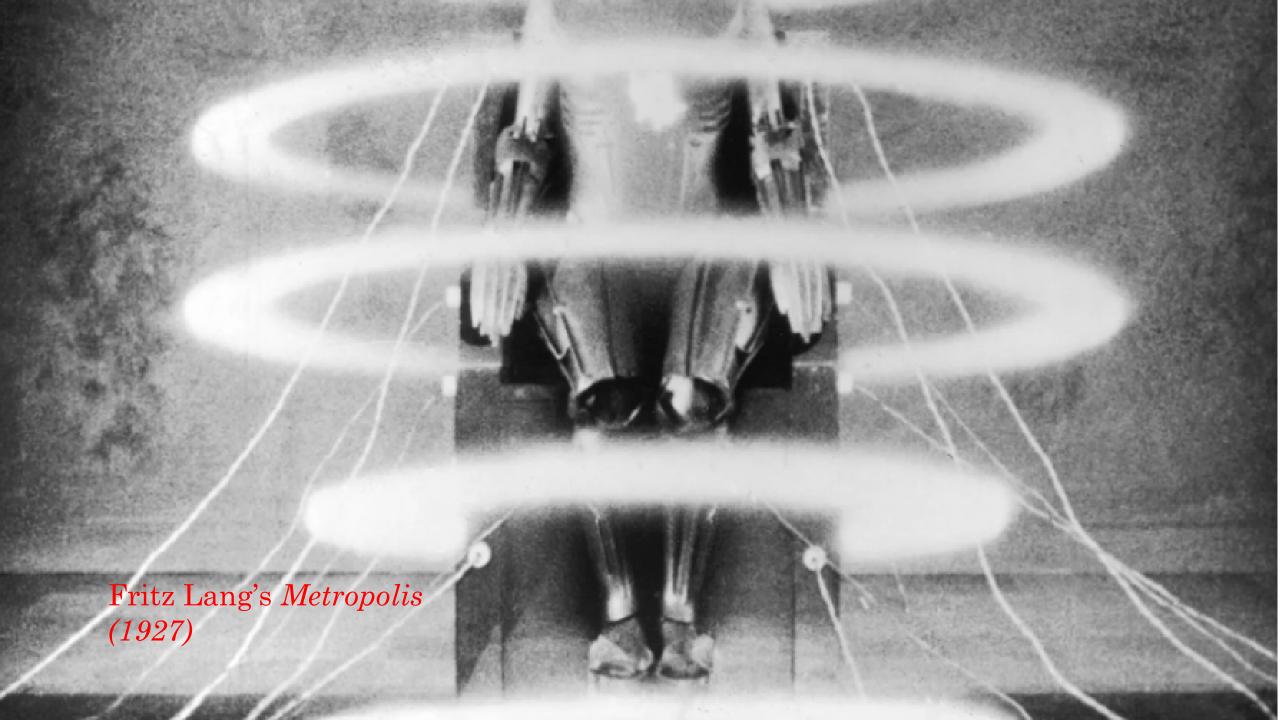
In the fullness of time, we and our students will find lots of good reasons for using some chatbots in particular ways for performing the tasks at which they excel.



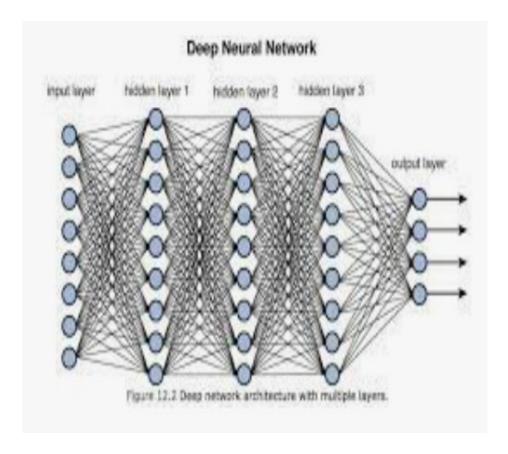
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College writing—intended to teach best research practices, communicative articulacy, and critical thinking—is not one of those tasks.





## probabilistic mimicry



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

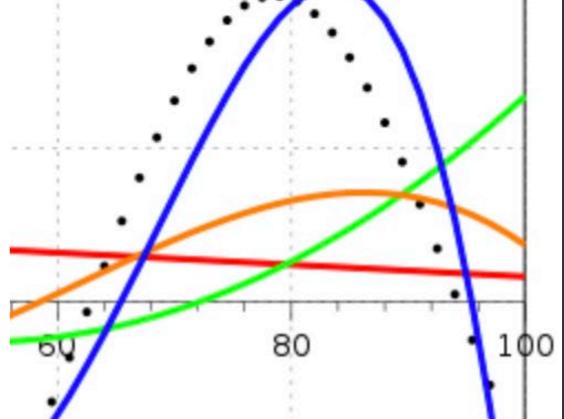






### But, rather, a vastly scaled up multi-dimensional version of this...

В	С	D	Е	F	
job	marital	education	default	housing	I
housemaid	married	basic.4y	no	no	r
services	married	high.scho	unknown	no	r
services	married	high.scho	no	yes	r
admin.	married	basic.6y	no	no	r
services	married	high.scho	no	no	у
services	married	basic.9y	unknown	no	r
admin.	married	profession	no	no	r
blue-collar	married	unknown	unknown	no	r
technician	single	profession	no	yes	r
services	single	high.scho	no	yes	r
blue-collar_	A DOMESTIC OF THE PARTY OF THE	ما الأفاساك.	-UNACONID	a	F



Technology

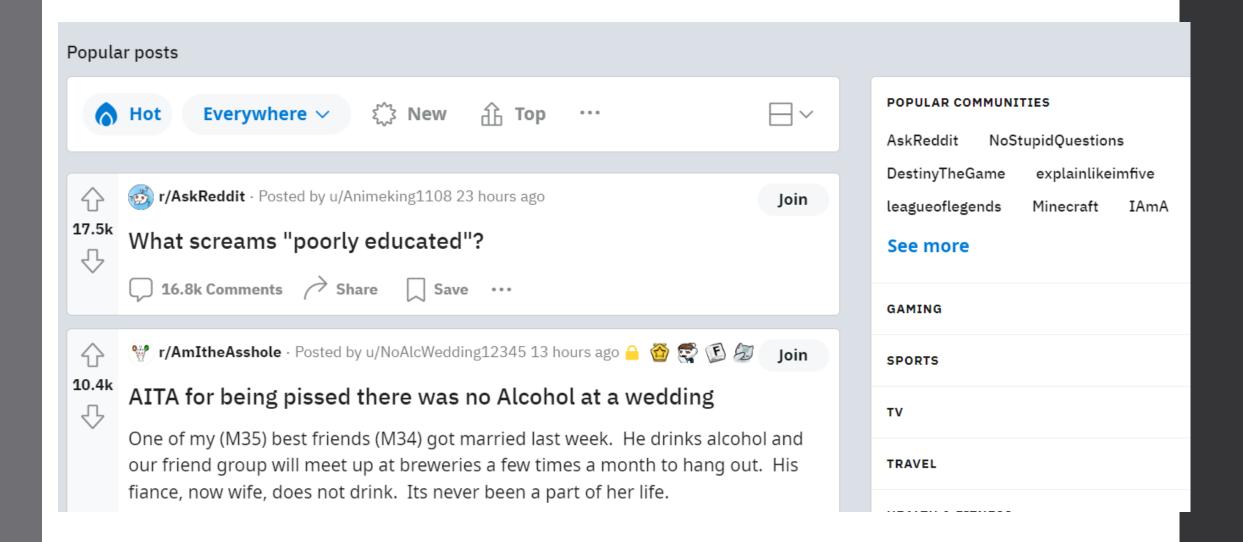
## Google cautions against 'hallucinating' chatbots, report says

Reuters

February 10, 2023 7:17 PM EST · Updated 6 months ago

Д

GIRL:	Hello. My name is		
	Hi. My name is CELEBRITY (MALE)		re with
	my mother and father and my little	NOUN	
GIRL:	I am here with my best girlN	OUN .	We are
	staying at the NAME (MALE)		
BOY:	I hear they have a great	there.	How is
GIRL:	ADJECTIVE . But the room or	nly costsN	MBER
	dollars a day.		
BOY:	I rented a/an for	this afternoon.	Maybe
	you and I could go		
GIRL:	I'd love to, but I promised	TY (FEMALE)	_ I'd go
	VERB ENDING IN 'ING' with her.		
BOY:	Well, tonight there is a/an	Danc	e at the
	Hotel Room.		
GIRL:	I'd love to go to that. Is it formal?		



### Robots Enact Malignant Stereotypes

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Authors Info & Claims

+ |

Easily Accessible Text-to-Image Generation Amplifies Demographic Stereotypes at Large Scale

Federico Bianchi, Pratyusha Kalluri, Esin Durmus, Faisal Ladhak, Myra Cheng, Debora Nozza, Tatsunori Hashimoto, Dan Jurafsky, James Zou, Aylin Caliskan

### Multimodal datasets: misogyny, pornography, and malignant stereotypes

TruthfulQA: Measuring How Models Mimic Human Falsehoods

Al Is Steeped in Big

Artificial intelligence continues to be fed racist and sexist training materials and then distributed around

Tech's 'Digital

Colonialism'

the world.

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#### **Emmanuel Kahembwe**

University of Edinburgh Edinburgh, UK e.kahembwe@ed.ac.uk Annotation reveals too much about the systems being developed, and the huge number of workers required makes leaks difficult to prevent. Annotators are warned repeatedly not to tell anyone about their jobs, not even their friends and co-workers, but corporate aliases, project code names, and, crucially, the extreme division of labor ensure they don't have enough information about them to talk even if they wanted to. (Most workers requested pseudonyms for fear of being booted from the platforms.) Consequently, there are no granular estimates of the number of people who work in annotation, but it is a lot, and it is growing. A recent Google Research paper gave an order-of-magnitude figure of "millions" with the potential to become "billions."

TECHNOLOGY

### AMERICA ALREADY HAS AN AI UNDERCLASS

Search engines, ChatGPT, and other AI tools wouldn't function without an army of contractors. Now those workers say they're underpaid and mistreated.

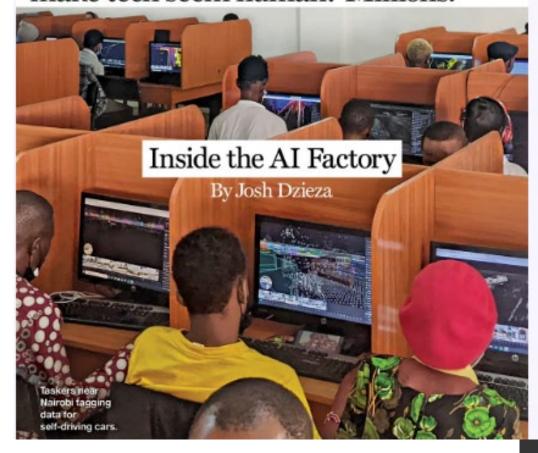
ARTIFICIAL INTELLIGENCE

### Al Is a Lot of Work

As the technology becomes ubiquitous, a vast tasker underclass is emerging – and not going anywhere.



How many humans does it take to make tech seem human? Millions.



HOME > TECH

# Kenyan data labelers were paid \$2 an hour to label child sexual abuse, bestiality, and other horrific content for ChatGPT creator OpenAI, report says

# 'Thirsty' AI: Training ChatGPT Required Enough Water to Fill a Nuclear Reactor's Cooling Tower, Study Finds

An average user's conversational exchange with ChatGPT amounts to dumping a large bottle of fresh water out on the ground, new research says.

**ENERGY** 

# The Environmental Impact of ChatGPT: A Call for Sustainable Practices In AI Development

BY SOPHIE

GLOBAL COMMONS

APR 28TH 2023

4 MINS

#### POWER PLAYERS

# Bill Gates says A.I. chatbots will teach kids to read within 18 months: You'll be 'stunned by how it helps'

Published Sat, Apr 22 2023-8:30 AM EDT

Tom Huddleston Ir



Newsletter: Hello World

**Back to Surveillance School** 

September 17, 2022 08:00 ET

### Opinion Inside Business

# Risk of 'industrial capture' looms over AI revolution

A handful of individuals and corporations now control much of the resources and knowledge in the sector

MADHUMITA MURGIA

+ Add to myFT

**Technology And Analytics** 

# Al Prompt Engineering Isn't the Future

by Oguz A. Acar

## Setting time on fire and the temptation of The Button

We used to consider writing an indication of time and effort spent on a task. That isn't true anymore.



ETHAN MOLLICK

JUN 3, 2023



Language models are mindless mimics that do not understand what they are saying—so why do we pretend they're experts?

By Will Douglas Heaven

March 29, 2022

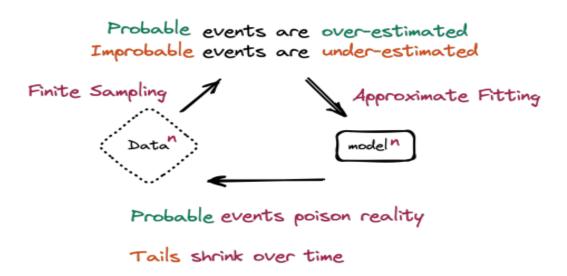
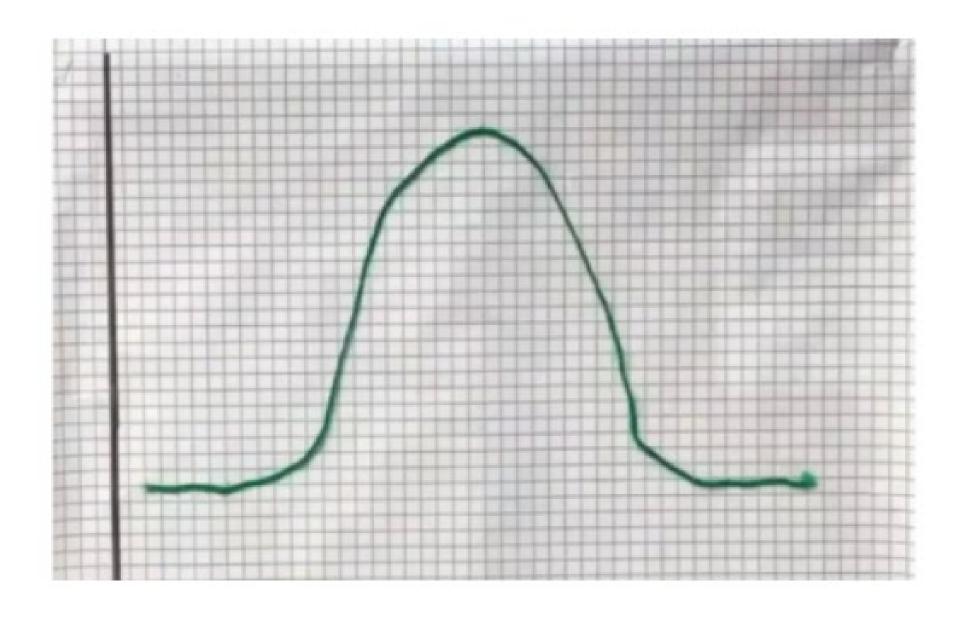


Figure 1: *Model Collapse* refers to a degenerative learning process where models start forgetting improbable events over time, as the model becomes poisoned with its own projection of reality.

Anderson said, "Just as we've strewn the oceans with plastic trash and filled the atmosphere with carbon dioxide, so we're about to fill the Internet with blah. This will make it harder to train newer models by scraping the web, giving an advantage to firms that already did that, or that control access to human interfaces at scale. Indeed, we already see AI startups hammering the Internet Archive for training data."

THE CURSE OF RECURSION:
TRAINING ON GENERATED DATA MAKES MODELS FORGET



# 17 fatalities, 736 crashes: The shocking toll of Tesla's Autopilot

Tesla's driver-assistance system, known as Autopilot, has been involved in far more crashes than previously reported

By Faiz Siddiqui and Jeremy B. Merrill

June 10, 2023 at 7:00 a.m. EDT



## Don't panic. Educate yourself...

Critical AI literacy begins with recognizing that "AI" isn't just a technology; it's a political economy that concentrates power

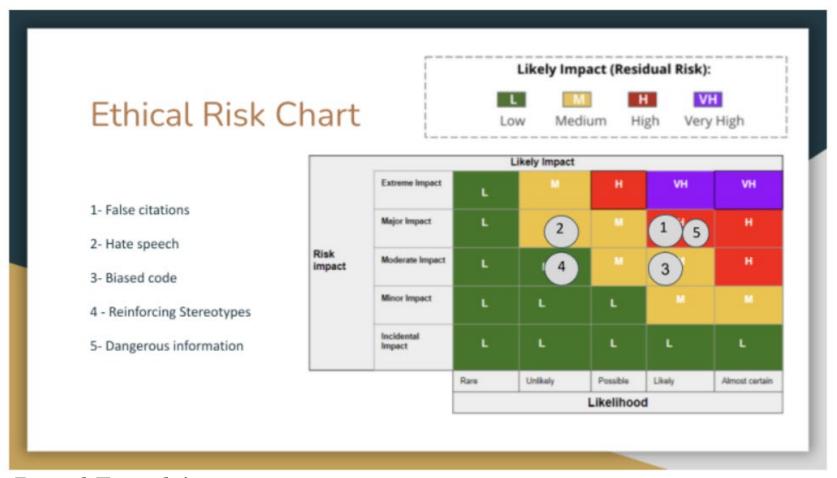
## Don't panic. Educate yourself...

But this doesn't mean that we can't be chill. ©

# Probing experiments (researchers not consumers)



Using the Ethical Risk Chart from the Smile Detection example case study in Raji et al. (2020), the students auditing ChatGPT summarized the results of their testing in the chart below.



Source: Daniel Estrada's senior seminar https://criticalai.org/2023/05/30/teaching-insights-how-to-teach-ai-to-students-ai-ethics-and-njit-audit-project-dr-daniel-estrada/



criticalai.org

CRITICAL AI