

AI Literacy for News Reporting

Journalism & Women Symposium CAMP 2023



Sachita Nishal

*4th year PhD student @ Northwestern
Communications & Computer Science*

Designing and studying AI tools to support
journalists

nishal@u.northwestern.edu



Mandi Cai

*2nd year PhD student @ Northwestern
Communications & Computer Science*

Studying public understanding of data / AI
& how news media plays a role

mandicai2028@u.northwestern.edu

What do you think artificial intelligence (AI) is?

What does it do? How does it work? Where are you most aware of it in daily life?

Please take a Post-it note, write down your thoughts, and put it on the board!



So what is AI and how does it work?

The image shows a Google search results page for the query "artificial intelligence". The search bar at the top contains the text "artificial intelligence" and the Google logo. Below the search bar, there are several search results, each with a thumbnail image and a title. A large, semi-transparent white box with the text "THIS IS MISLEADING." in red is overlaid on the middle of the page, covering parts of the search results.

Search Results:

- Investopedia:** Artificial Intelligence. [ar-ti-fish-ee-to-lyahnts] The simulation of human intelligence by software-coded heuristics.
- ZDNET:** artificial intelligence ...
- The Motley Fool:** What Is Artificial Intelligence? | The ...
- Simplilearn.com:** Artificial Intelligence? Types...
- MarkTechPost:** Hardware Development ...
- CNET:** ChatGPT Glossary: 41 AI ...
- Bulletin of the Atomic Scientists:** Convergence: Artificial intelligence ...
- Forbes:** The Future Of Artificial Intelligence
- Britannica:** Artificial intelligence (AI ...
- GeeksforGeeks:** Artificial Intelligence | An ...

Text Overlay: THIS IS MISLEADING.

So what is AI and how does it work?

- AI is not one thing – it's a **set of technologies**
- Used to **automate** and **scale** things (“AI-assisted”)
- “AI” is a rhetorical device and can be **framed** by the media in many ways
 - We can look at how climate change and nuclear power were framed by politicians and commentators (Nisbet, 2009)

Some framings of AI in the wild

AI to turbocharge productivity and creativity

Introducing Notion AI ✨

Access the limitless power of AI, right inside Notion.
Work faster. Write better. Think bigger.

Get started

AI to preserve the human touch

More than an AI detector Preserve what's human.

We bring transparency to humans navigating a world filled with AI content.
GPTZero is the gold standard in AI detection, trained to detect ChatGPT, GPT4, Bard, LLaMa, and other AI models.

AI to automate people's work

The technical potential for automation in the US

Many types of activities in industry sectors have the technical potential to be automated, but that potential varies significantly across activities.

Technical feasibility: % of time spent on activities that can be automated by adapting currently demonstrated technology



Which one is it then?

Which one is it then?

... it's complicated

Like any other technology, what AI is also about:

**whose interests it
represents**

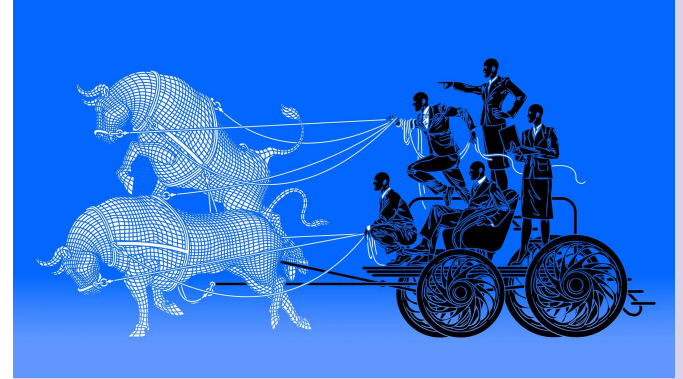
what it's used for

who gets a say

who is excluded

Here's one realistic way to look at it

So, I would like to propose another metaphor for the risks of artificial intelligence. I suggest that we think about A.I. as a management-consulting firm, along the lines of McKinsey & Company. Firms like McKinsey are hired for a wide variety of reasons, and A.I. systems are used for many reasons, too. But the similarities between McKinsey—a consulting firm that works with ninety per cent of the Fortune 100—and A.I. are also clear. Social-media companies use machine learning to keep users glued to their feeds. In a similar way, Purdue Pharma used McKinsey to figure out how to “turbocharge” sales of OxyContin during the opioid epidemic. Just as A.I. promises to offer managers a cheap replacement for human workers, so McKinsey and similar firms helped normalize the practice of mass layoffs as a way of increasing stock prices and executive compensation, contributing to the destruction of the middle class in America.



<https://www.newyorker.com/science/annals-of-artificial-intelligence/will-ai-become-the-new-mckinsey>

How do you think about an AI system you might be reporting on?

Once upon a time we wrote a paper!

Motivations, Goals, and Pathways for AI Literacy for Journalism

MANDI CAI* and SACHITA NISHAL*, Northwestern University, USA

Science and technology news, which includes coverage on AI technologies, serves a plurality of functions for lay audiences today, such as education, agenda-setting, and curation. Reporting on AI is particularly challenging given the lack of transparency surrounding most black-box algorithms, and the rapid pace of progress in this domain. In addition to the difficulties specific to AI reporting, journalists' ability to report newsworthy information in a way that adheres to their professional norms of objectivity, accuracy, and transparency is increasingly challenged by institutional upheavals within their profession. In this workshop paper, we make a case for the importance of AI literacy among journalists, and lay out objectives for a curriculum designed to teach journalists about AI, and how they can approach reporting on it, given their prominent role in the dissemination of scientific information to the public.

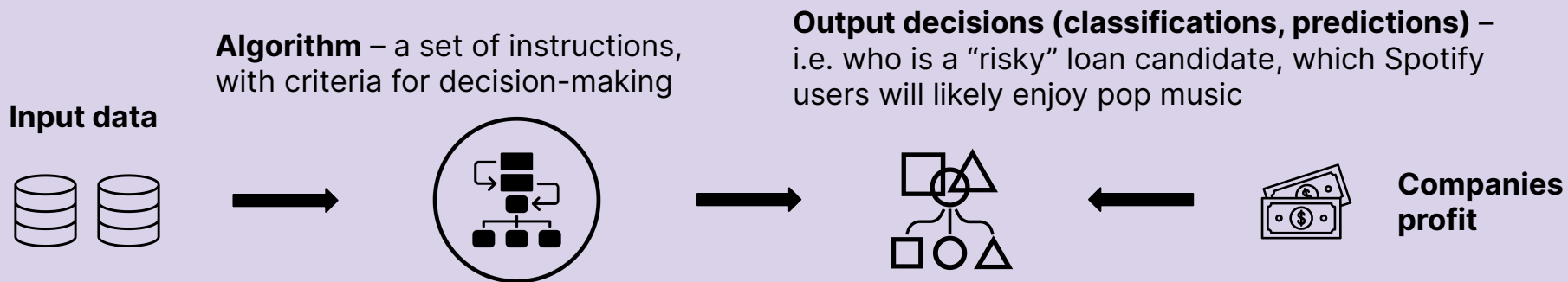
<https://www.sachitanishal.com/pdfs/2023-ai-literacy-chi.pdf>

How can we report on AI?

You are still owed answers and transparency about AI, as with other decision-making processes

You would not shy away from opaque, confusing logic that was dictated by humans to make decisions, so why shy away from **logic that was dictated by humans and implemented by a computer?**

How can we report on AI?



What data is used to **train** the algorithms?

Who decided on which training **data** to use? (Who decided should always be asked)

If the training data is collected from people, how did they give their consent? Was it informed consent?

What decisions are made by this algorithm?

Should it be making these decisions?

What **criteria** does it rely on to make these decisions? How is each criterion weighted?

Who do these decisions impact?

What feedback have you received from those who are impacted?

Do the people impacted have options for recourse?

Who is accountable when a system fails?

How do AI technologies fit into your business model?

How much increased shareholder value do you attribute to AI technologies?

What work do you plan to automate, and which employees will be impacted?

How can we report on AI?

Algorithm Tips

<http://algorithmtips.org/>

Home Database Alerts Flags Help Login with Google

Depression and Substance Use Criteria Add Flag

Criteria that determines if a participant qualifies as having major depression based on the systems they have experiences such as anhedonia or feelings of hopelessness. The criteria is derived from the Diagnostic and Statistical Manual of Mental Disorders and is used in an algorithm to assess depression and substance use. The Centers of Disease Control and Prevention used the tool in its Medical Monitoring Project for persons diagnosed with HIV infection.

<https://www.cdc.gov/hiv/library/reports/hiv-surveillance-special-reports/no-29/content/technical-notes.html> (Cache)

Found via a search for "computation" on July 15th, 2022. Published here on September 20th, 2022.

Additional Info

Jurisdiction	Federal Agency - Executive
Source	Department of Health and Human Services
Main Topics	Health
People & Organizations	CDC

Crowd Ratings

> Potential for Controversy	3.7 / 5	<div><div style="width: 74%;"></div></div>
> Number of People Impacted	5.0 / 5	<div><div style="width: 100%;"></div></div>
> Negative Societal Impact	4.0 / 5	<div><div style="width: 80%;"></div></div>
> Surprising, Unusual, or Unexpected	3.3 / 5	<div><div style="width: 66%;"></div></div>

Home Energy Rating System Index Add Flag

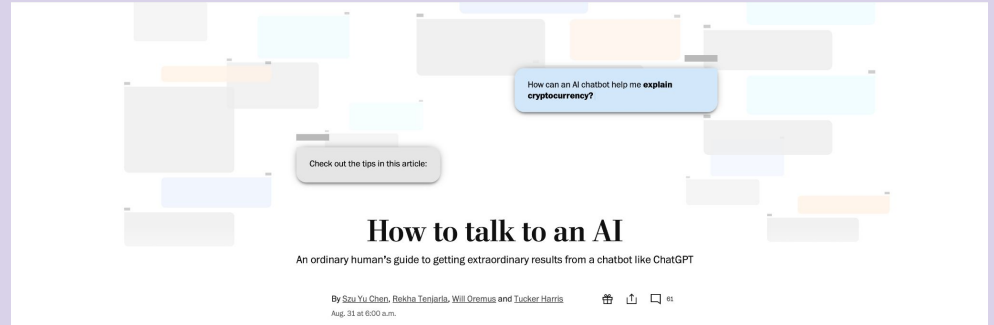
Rating software that calculates heating, cooling, hot water, lighting, appliance energy loads, consumption, and costs for households as well as generates a corresponding energy efficiency score. These scores are compared to

Some example coverage of AI



Billy Perrigo

The Workers Behind AI Rarely See Its Rewards. This Indian Startup Wants to Fix That

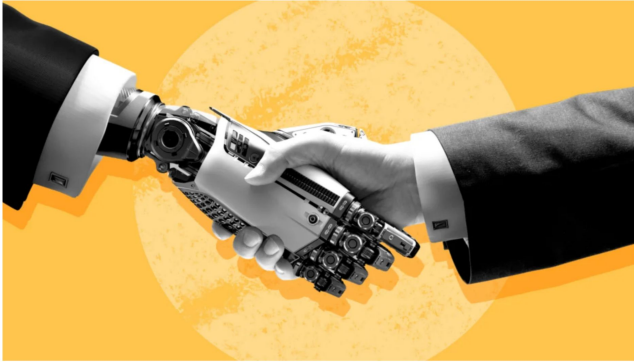


Szu Yu Chen, Rekha Tenjaria, Will Oremus, Tucker Harris
How to talk to an AI chatbot

Some example coverage of AI

AI may be as effective as medical specialists at diagnosing disease

Published 7:23 AM EDT, Wed September 25, 2019



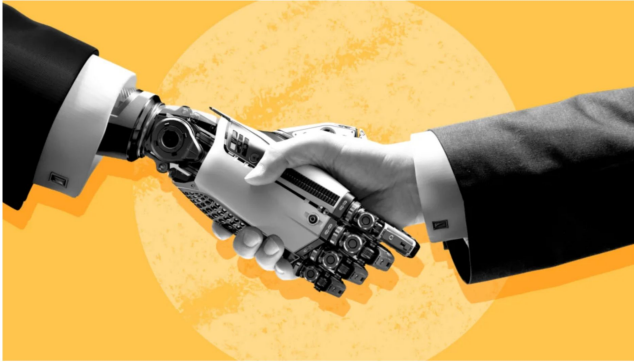
Alle Schmidt/CNN

Oversimplification, almost bait-y?

Some example coverage of AI

AI may be as effective as medical specialists at diagnosing disease

Published 7:23 AM EDT, Wed September 25, 2019



Alle Schmidt/CNN

Oversimplification, almost bait-y?

Paris-based Mistral releases first generative AI model — and it's totally free

Small model, great conviction

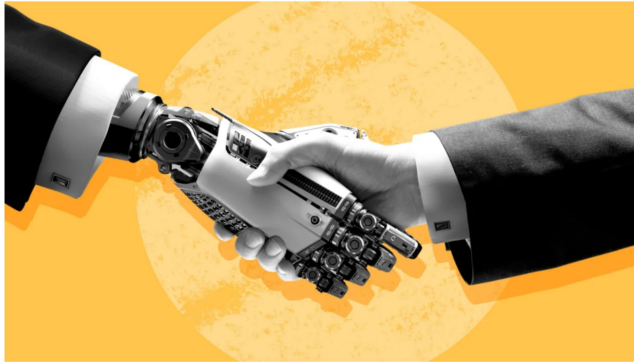
September 29, 2023 - 1:05 pm

Cool story ... but this is not the dawn of AI democracy

Some example coverage of AI

AI may be as effective as medical specialists at diagnosing disease

Published 7:23 AM EDT, Wed September 25, 2019



Alex Schmidt/CNN

Oversimplification, almost bait-y?

Paris-based Mistral releases first generative AI model — and it's totally free

Small model, great conviction

September 29, 2023 - 1:05 pm

Cool story ... but this is not the dawn of AI democracy

Unfiltered content raises concerns

In the aftermath of its release, Mistral's 7B model faced significant scrutiny for its failure to filter out harmful and dangerous content. Independent tests conducted by Sifted demonstrated that the model readily provided step-by-step **instructions on self-harm and harming others**, a stark contrast to its competitors that consistently refused to provide such information. This discovery raised alarm bells and ignited a heated discussion on the responsibility of AI developers to ensure the safety of their models.

**AI does not determine an inevitable future –
there is no one guaranteed outcome here.**

**We all can (and should) play a role in shaping
this future.**

Let's think about AI together!

Based on what we discussed today and beyond, what would you ask or want to know about the technology proposed?

How would you pitch this to the editor?

What were your blockers in understanding the scenario, framing questions or pitching a story?

Link to tipsheet:

