

What can the Luddites teach us about governance of artificial intelligence in healthcare?

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Government of South Australia
Women's and Children's Health Network



Women's & Children's Hospital



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Acknowledgement of Country

I would like to acknowledge the land I work from as the traditional lands of the Kaurna peoples, whose deep spiritual connection to Country continues to this day. I wish to pay my respects to the Kaurna people, and to their Elders – past, present, and future. I extend that respect as well to Aboriginal and Torres Strait Islander colleagues who are here today.

In recognition of the specific challenges posed by AI for Aboriginal people, AI Governance work has been undertaken in partnership with the Aboriginal Health Unit at WCHN. Thank you in particular to Bec Kimlin, Cathy Leane, and Marnie Campbell.



"First there is an "on the one hand" statement. It tells all the good things computers have already done for society and often even attempts to argue that the social order would already have collapsed were it not for the "computer revolution".

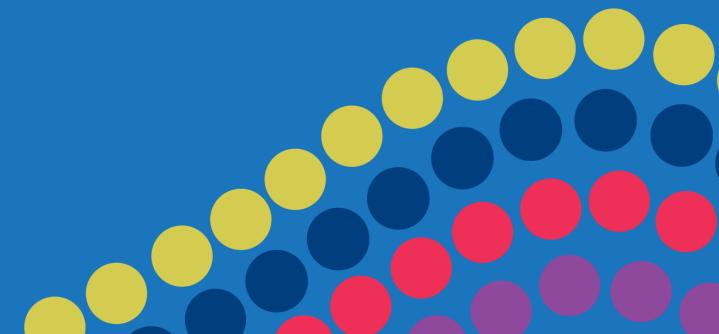
This is usually followed by an "on the other hand" caution which tells of certain problems the introduction of computers brings in its wake. The threat posed to individual privacy by large data banks and the danger of large scale unemployment induced by industrial automation are usually mentioned.

Finally, the glorious present and prospective achievements of the computer are applauded, while the dangers alluded to in the second part are shown to be capable of being alleviated by sophisticated technological fixes."

Joseph Weizenbaum. On the impact of the computer on society. *Science*, 1972.

Overview

1. The real history of the Luddites
2. Understanding AI: the Mechanic and the Luddite
3. Implications for AI Governance
4. A proposal for "AI Literacy"



Who were the Luddites?

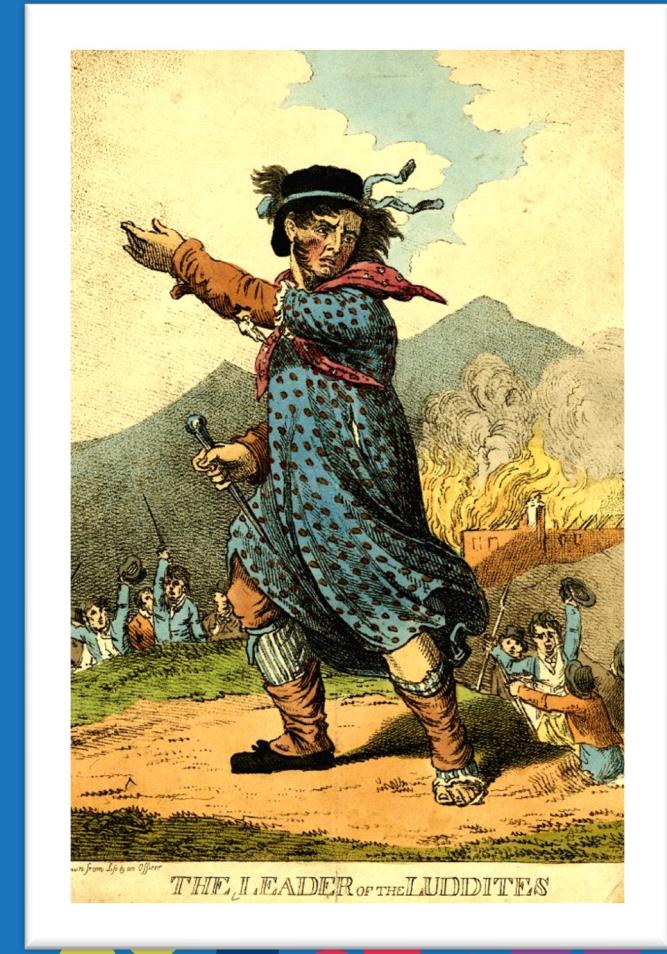
Luddite story is fundamentally about autonomy and social power - "obnoxious machines"

Cloth workers in industrialising England (early 18th C)

Emergence of the factory system, entrepreneurial class, and implications for their autonomy

A familiar story about regulation and vested interests

Frames the emerging neo-Luddite movement today



Autonomy and Power

Hermeneutical power: holding the ability to shape meanings in social discourse by virtue of social power[1]

Manifests as:

- Who is 'AI literate'
- What 'AI expertise' means
- Empowerment and disempowerment of individuals, groups, and organisations

Plus, serious material power over regulatory agencies, policy leaders, academia, health[2]

[1] Romden-Romluc, K. Hermeneutical injustice and the problem of authority. *Feminist Philosophy Quarterly*. 2017. [2] Abdalla M, Abdalla M. The grey hoodie project: Big tobacco, big tech, and the threat on academic integrity. In *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society* 2021.



Image by Cybernews.

MILA FIORDALISI REGULATION NOV 24, 2025 2:00 AM

Europe Is Bending the Knee to the US on Tech Policy

The Trump administration's pressure on European regulators is having an impact, with fewer restrictions on Big Tech and canceled measures.



Idealism vs Materialism (per Sadowski)

Idealism: prioritisation of ideas, future state, 'vibes' as influences on the movement of society

Materialism: preoccupied with lived realities, conditions, and current state of things

Sadowski argues techno-optimism is firmly sitting in the idealism category, including fields like healthcare

...so is AI Safety and AI Ethics

Sadowski, J. 2025. *The Mechanic and the Luddite: A Ruthless Criticism of Technology and Capitalism*. Oakland, CA: University of California Press.



Materialist understanding

The Luddite:

- Understands power relations, political structures, the context in which a technology is proposed and used



Chris Smalls led workers in New York who won a contest in April 2022 to establish the first Amazon union in the US

The Mechanic

- Understands the workings of the machine in a technical sense, can 'tinker'

Neither is superior; they complement each other

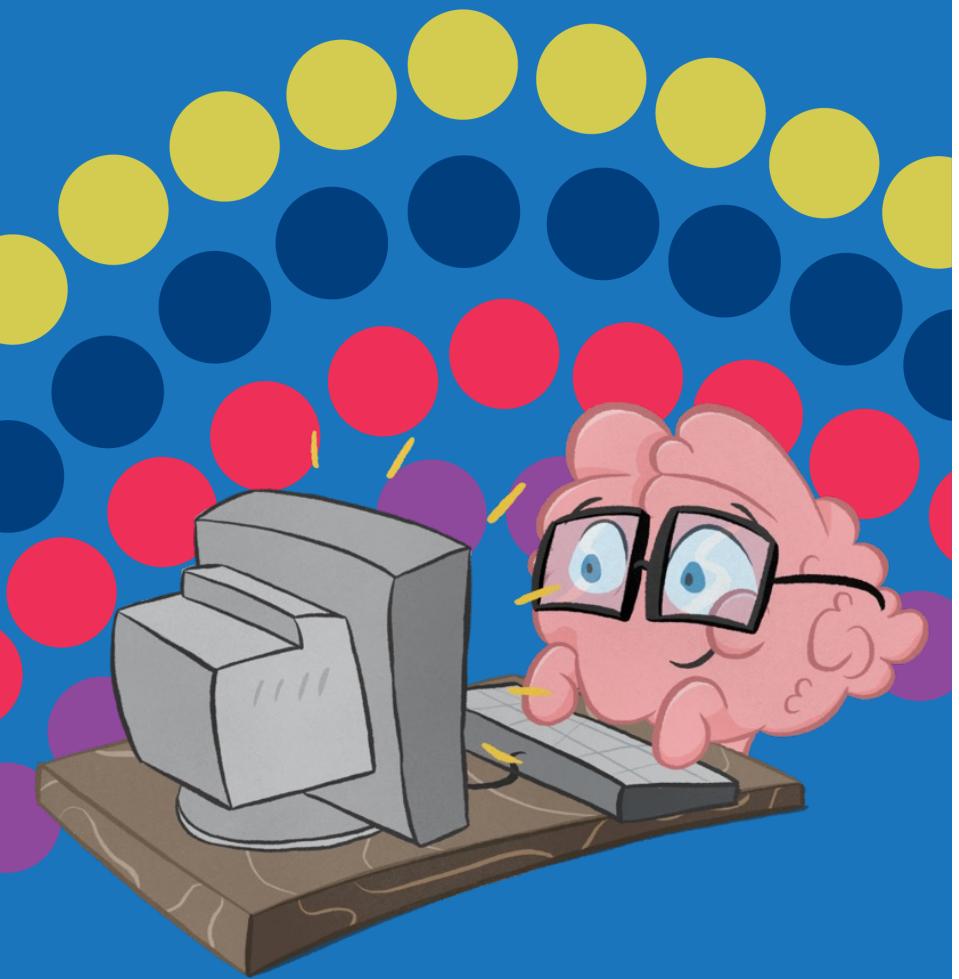
Refute hermeneutical power

Sadowski, J. 2025. *The Mechanic and the Luddite: A Ruthless Criticism of Technology and Capitalism*. Oakland, CA: University of California Press.



Photo credit: Jan Sonnenmair

Implications for AI Governance



How can we govern AI like Mechanics and Luddites, instead of idealists?

Comment | Published: 09 August 2023

Enabling collaborative governance of medical AI

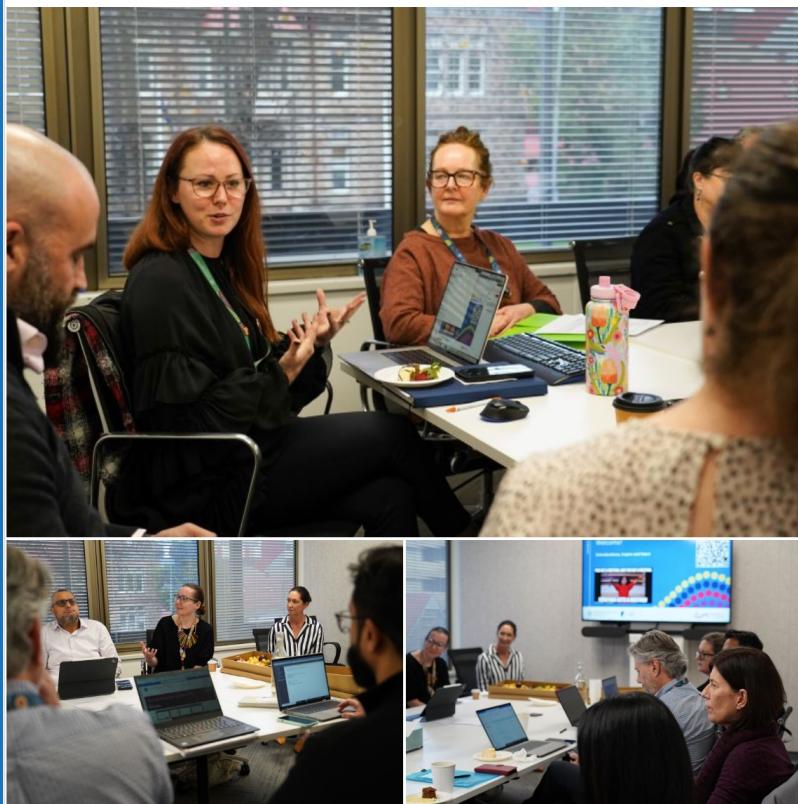
[W. Nicholson Price II](#) , [Mark Sendak](#), [Suresh Balu](#) & [Karandeep Singh](#)

[Nature Machine Intelligence](#) 5, 821–823 (2023) | [Cite this article](#)

Medical artificial intelligence needs governance to ensure safety and effectiveness, not just centrally (for example, by the US Food and Drug Administration) but also locally to account for differences in care, patients and system performance. Practical collaborative governance will enable health systems to carry out these challenging governance tasks, supported by central regulators.



Collaborative Governance



Inaugural WCHN AI Governance Committee Meeting



i-scribe meets Aboriginal Health team members
Scekar Valadian, Cathy Leane, and Marnie Campbell

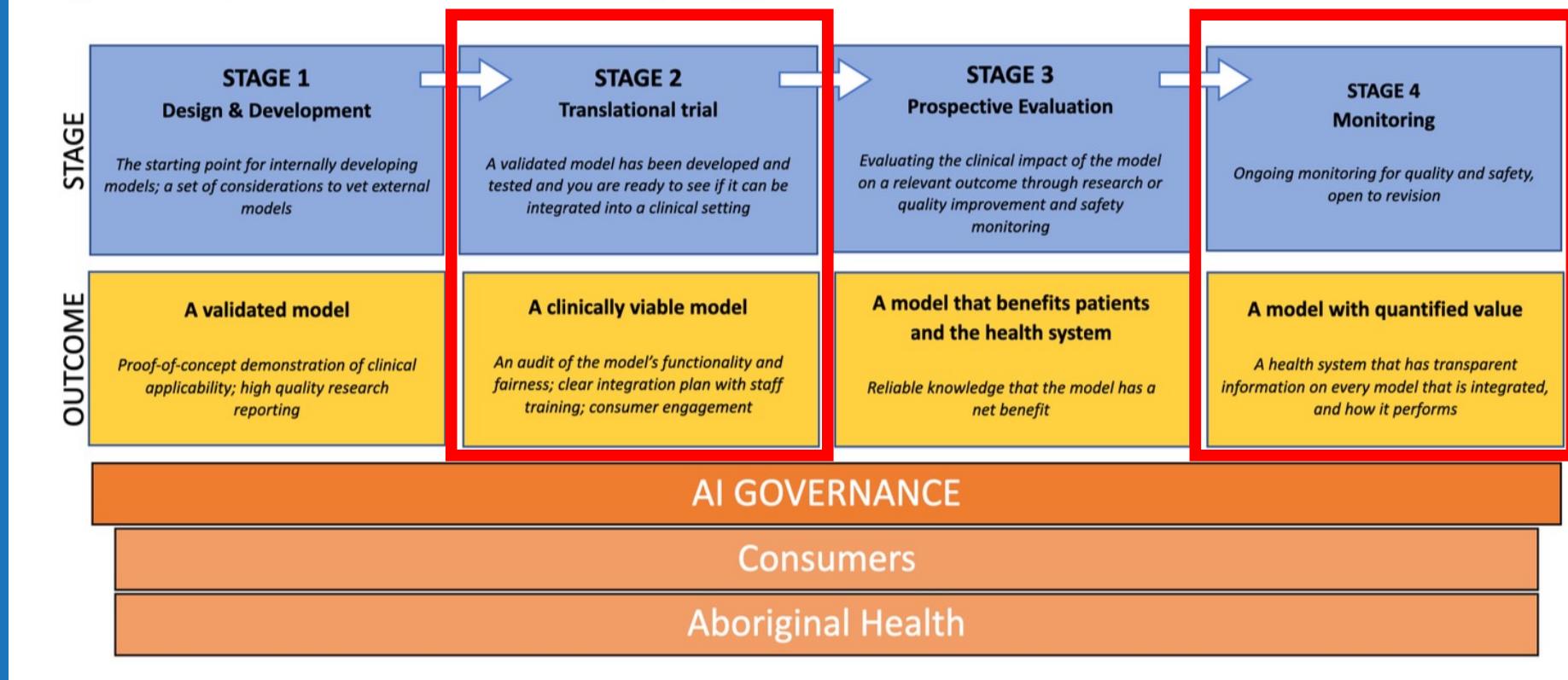
Diverse membership to represent each area of the network

Accountability, responsibility is distributed

Leveraging institutional wisdom and wisdom of lived experience we counteract hermeneutical power

Getting into the 'nitty gritty'

Figure 1: Proposed model of WCHN's Lifecycle Approach to Institutional AI Governance



Governance mechanisms: WCHN Health Research Ethics Committee; National Health and Medical Research Council; National Safety and Quality Health Service Standards (particularly 1 and 2); WCHN's CREATE Values, Strategic Priorities

AI "Literacy" (?)



What is AI literacy?

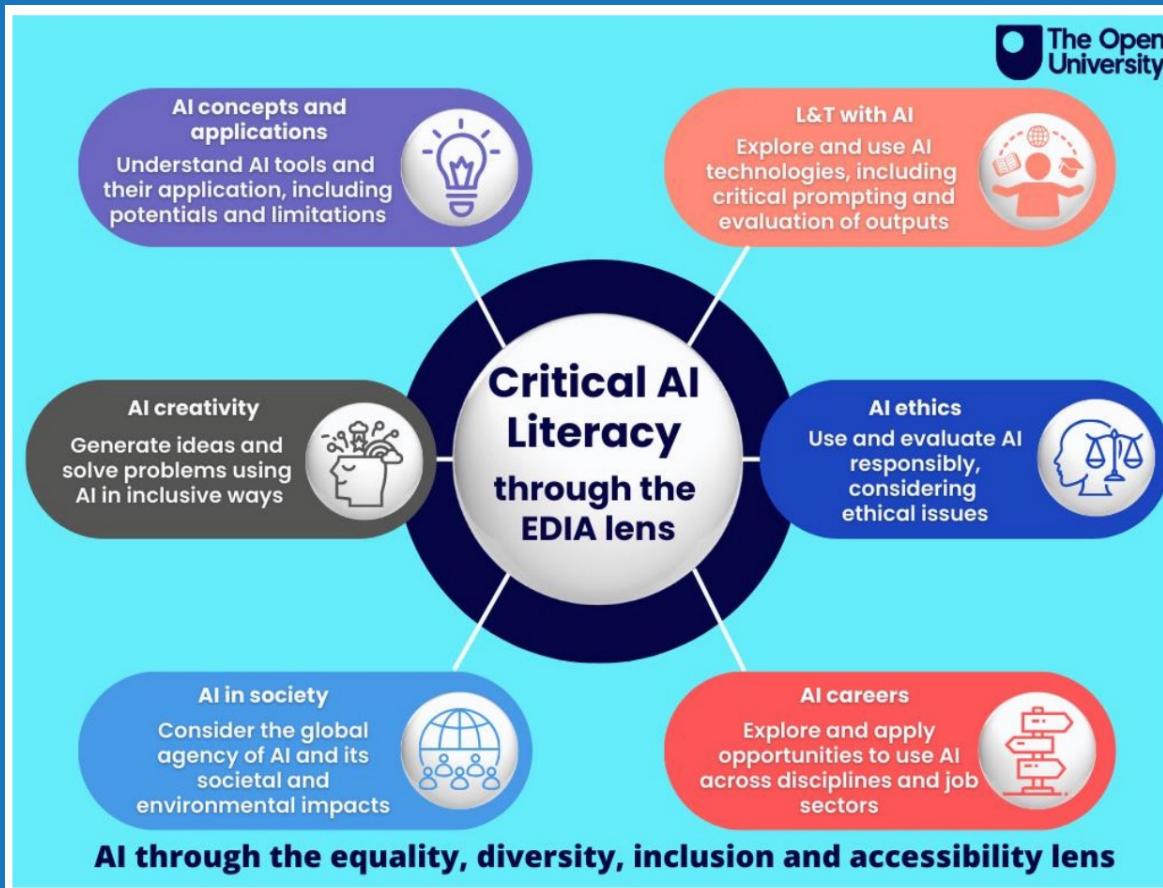
Per the EU AI Act:

Refers to the skills, knowledge, and understanding necessary for individuals to make informed decisions regarding the deployment and use of AI systems, while being aware of the associated opportunities, risks, and potential harms. This includes the ability to critically evaluate AI technologies and effectively communicate and collaborate with AI.

Accountability: onus is on the provider, not the user



AI literacy -> *Critical* AI literacy



Prof Iris van Rooij & Dr. Olivia Guest

Radboud Universiteit



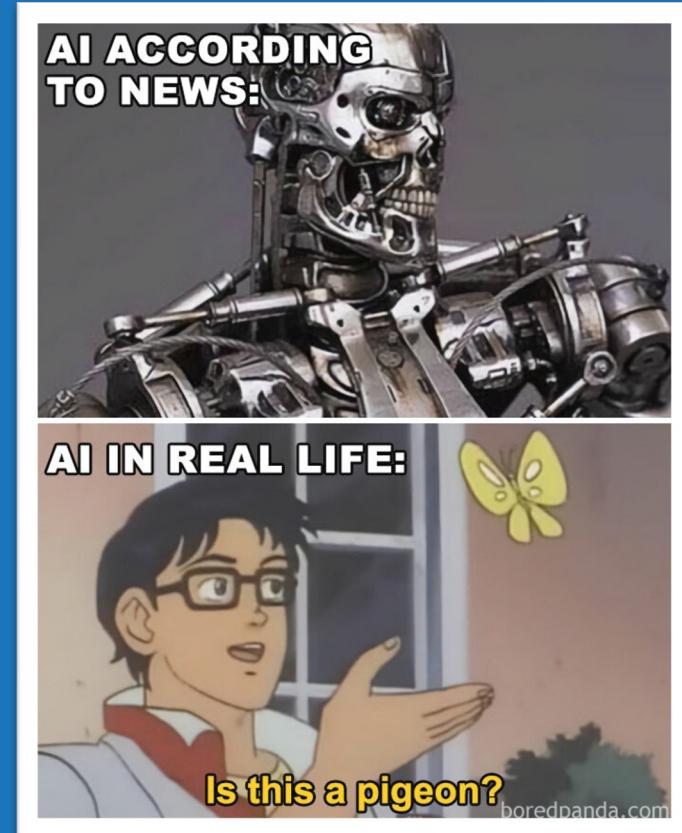
<https://www.ru.nl/en/research/research-projects/critical-ai-literacy-cail>

Now add functionality

Neglecting functionality and performance of systems

Key points

- How machines really 'learn'
- Accuracy means explanation, not knowledge
- "Mistaking the map for the territory" (Abeba Birhane)
- 'Garbage in, garbage out' is over-simplified
- Regression to the mean



U.S. NEWS 

'Godfathers of AI' Warn Superintelligence Could Trigger Human Extinction

DANGER ZONE

Pioneers of artificial intelligence have signed a statement warning about its dangers.



Wiktoria Gucia
Breaking News Intern

Published Oct. 22 2025 9:24PM EDT

3 Comments



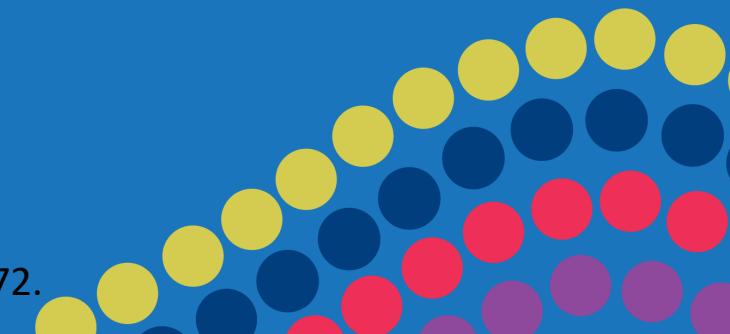
[Timnit Gebru](#), [Emily M. Bender](#), Angelina McMillan-Major

Statement from the listed authors of Stochastic Parrots on the “AI pause” letter

March 31, 2023

"The closing paragraph consists of a plea for generous societal support for more, and more large-scale, computer research and development. This is usually coupled to the more or less subtle assertion that only computer science, hence only the computer scientist, can guard the world against the admittedly hazardous fallout of applied computer technology."

Joseph Weizenbaum. On the impact of the computer on society. *Science*, 1972.



Key messages

See AI like a Luddite, a Mechanic, or both

AI Literacy? Make it material!

Recognise, counteract, and resist Big Tech narratives



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Australia establishes new institute to strengthen AI safety

The Australian Government is establishing an Australian Artificial Intelligence Safety Institute (AISI) to respond to AI-related risks and harms.

25 November 2025 • News • 2 min read

Thank you!



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