Societal, ethical and legal implications of AI

Sonja Aits

Lund University, 2023-12-15

Using AI and Big Data for biomedical research is not without challenges

AI analysis can be prejudiced or wrong

Report: IBM Watson delivered 'unsafe and inaccurate' cancer recommendations

JULY 25, 2018 BY FINK DENSFORD — LEAVE A COMMENT

Biased Data the Real Danger of AI

By Oliver Mitchell | March 19, 2018

"Garbage in – Garbage out"

Do you support open research?

What could you do with AI?

What could you do with AI if you were?

- the leader of an EU country

- the head of the WHO

- a primary care doctor in a developing nation

- a specialist in the world's best hospital

- the head of Amnesty International

Microsoft health unit is a 'multi-billion dollar business,' medical chief says

Apple's Healthcare Take Could Be $313 Billion by 2027, Analysts Say

Facebook Ventures Into Medical Imaging Research

BY SHOBHIT SE

Google's project to 'cure death,' Calico, announces $1.5 billion research center

Calico will work with big pharma to create and market new drugs for diseases like cancer and Alzheimer's

By Ben Popper | Sep 3, 2014, 2:33pm EDT
Via Re/code | Source Calico Labs

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BUS

Column: Alexa may be key to Amazon's looming domination of the healthcare market

Using AI and Big Data for biomedical research is not without challenges

Privacy concerns

Anonymous patient data may not be as private as previously thought

REUTERS   By Linda Carroll, Reuters • December 21, 2018

REGULATION

There's No Such Thing as Anonymous Data

by Scott Berinato

FEBRUARY 09, 2015

svt NYHETER   Nyheter   Lokalt   Sport   SVT Play   Barn

/ INRIKES

2,7 miljoner inspelade samtal till 1177 Vårdguiden helt oskyddade på internet
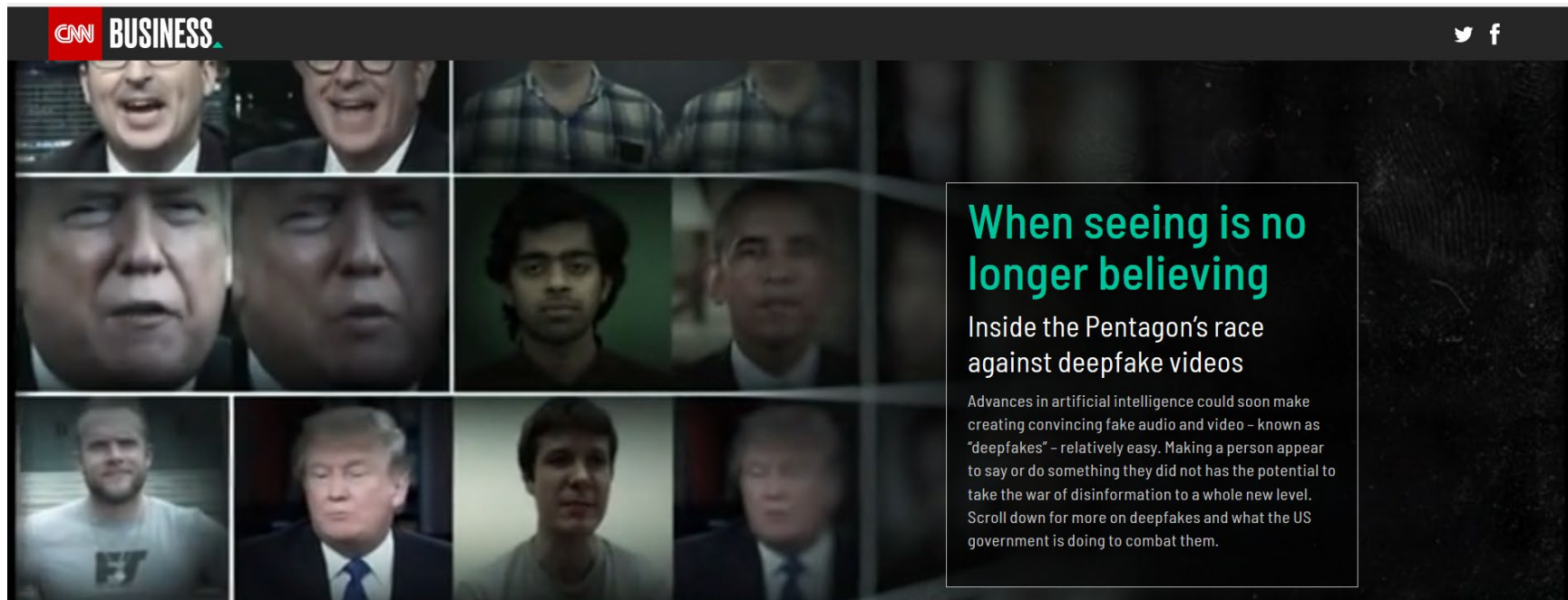
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- the head of Amnesty International

- the leader of a global tech company

OpenAI has published the text-generating AI it said was too dangerous to share

The lab says it's seen 'no strong evidence of misuse so far'

By James Vincent | Nov 7, 2019, 7:24am EST

CNN BUSINESS

When seeing is no longer believing

Inside the Pentagon's race against deepfake videos

Advances in artificial intelligence could soon make creating convincing fake audio and video – known as "deepfakes" – relatively easy. Making a person appear to say or do something they did not has the potential to take the war of disinformation to a whole new level. Scroll down for more on deepfakes and what the US government is doing to combat them.

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- the leader of a global tech company

- a terrorist
- a dictator
- a white supremacist
- a criminal

Do you think your research falls under dual use?

Should we have open research in the field of AI?

AI **for** sustainability
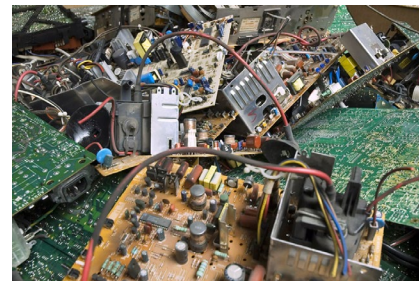
Sustainability **of** AI

Energy

Researcher ← **Supercomputer** ← **Transport** ← **Production** ← **Raw materials**

Waste and pollution

EU Ethics guidelines for trustworthy AI

(1) lawful - respecting all applicable laws and regulations
(2) ethical - respecting ethical principles and values
(3) robust - both from a technical perspective while taking into account its social environment

https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai

7 requirements for ethical AI

- Human agency and oversight
- Technical Robustness and safety
- Privacy and data governance
- Transparency
- Diversity, non-discrimination and fairness
- Societal and environmental well-being
- Accountability

How can we ensure we have a constructive public debate about these matters?