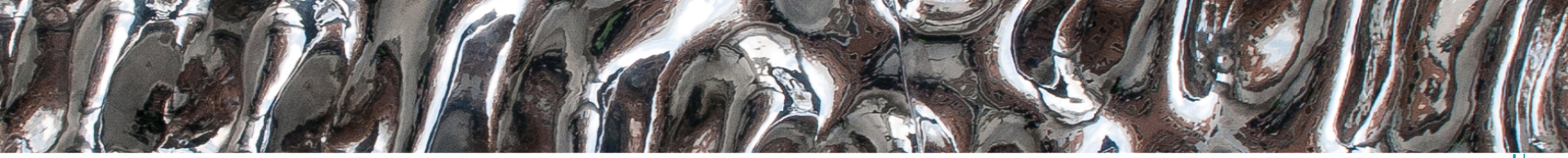
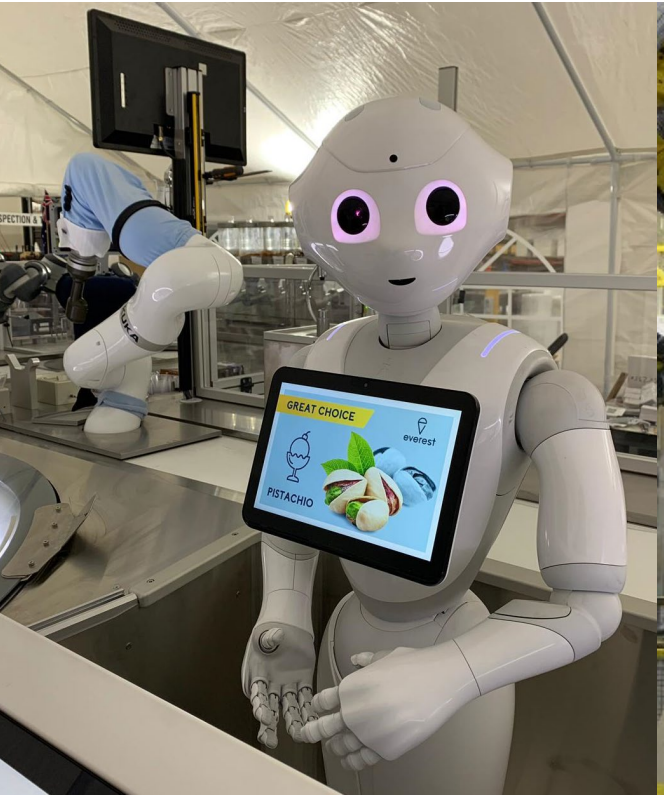


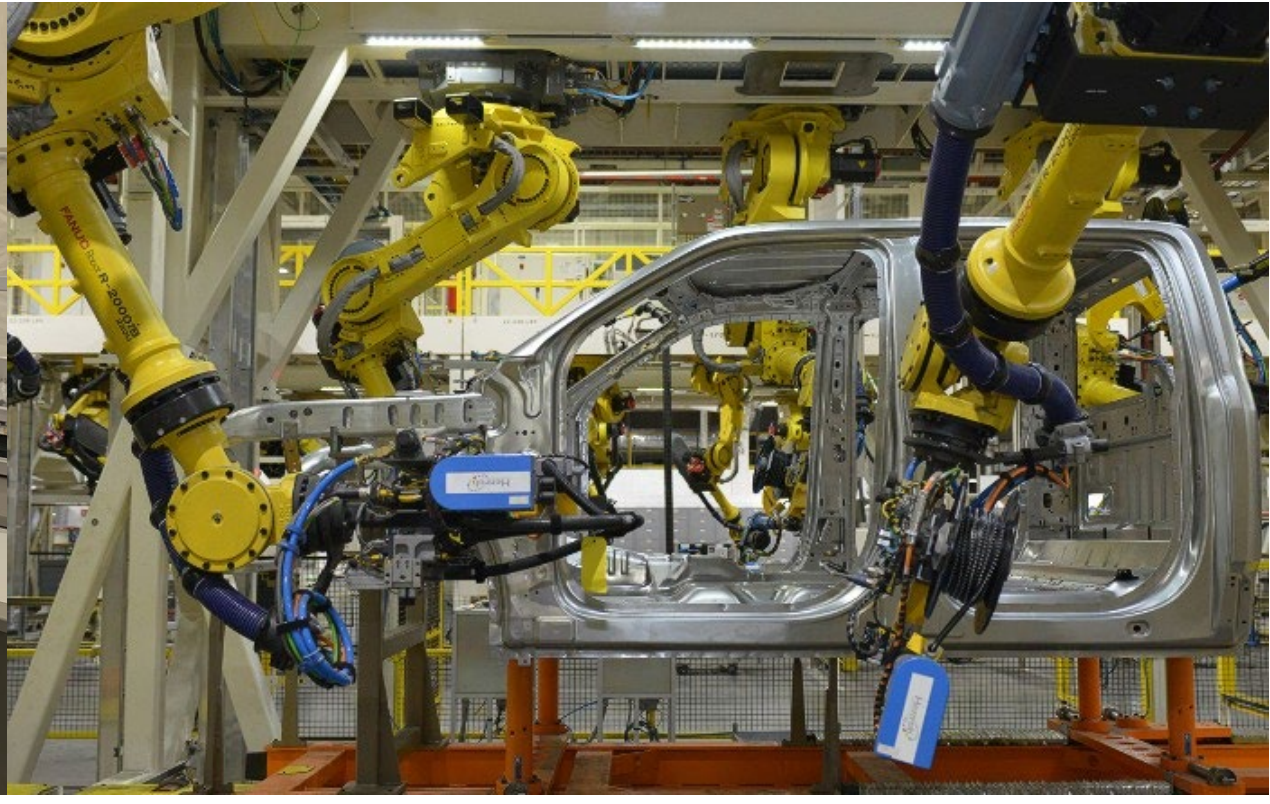
UiO : Department of Informatics
University of Oslo

AI - myter eller magi?

Foto; https://www.amazon.com/Devils-Advocate-Coop-Chris-Cooper/dp/0971237425

Førsteamanuensis Lene Pettersen (PhD).
Lenpe@ifi.uio.no Twitter: @LeneGBP





AI som erstatter for arbeid

AI som erstatter for algoritmer

I en ideell verden er data objektive og fritt for støy. Som dette stoppskiltet som systemet til selvkjørende biler tolket som et 45 km fartsgrenseskilt.


THINK
ΣΚΕΨΟΥ
$300,000
$1,000,000
$200,000
KEN
WATSON
BRAD

"Watson's win on Jeopardy wasn't as straightforward as everyone thinks. Contrary to public perception, Watson has never had a speech interface. So for Jeopardy the questions were submitted in written form to Watson. However, the way the game was played, Watson received the question as soon as Alex Trebek began reading the question to the other contestants. With the speed that computers process information this meant that Watson had something like an hour to contemplate the question before the other contestants had finished hearing the last words. With this type of advantage it's no surprise that Watson won. And IBM's marketing department has taken that golden ring and run with it ever since."

https://www.brightworkresearch.com/demandplanning/2019/06/how-ibm-is-distracting-from-the-watson-failure-to-sell-more-ai/

2013

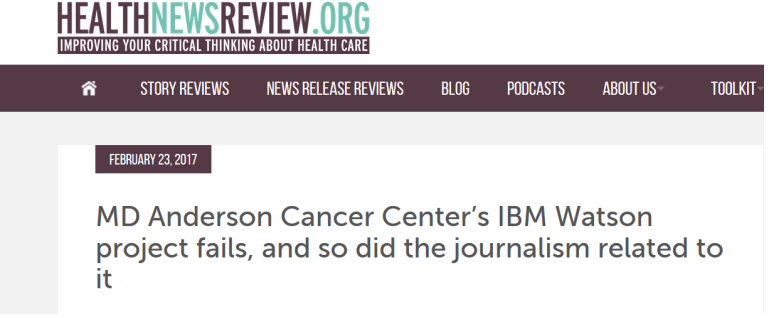
Det ble lovet at Watson skulle revolusjonere kreftbehandlingen gjennom mer personalisert kreftbehandling og gi bedre kliniske beslutninger.

2017 – prislapp: $62 million

Elish og boyd (2018) Situating methods in the magic of Big Data and AI. *Communication Monographs* 85(1): 57–80.

FEBRUARY 23, 2017

MD Anderson Cancer Center's IBM Watson project fails, and so did the journalism related to it



"When it comes to IT coverage, **journalists should make a habit of pointing out gaps between what's claimed and what's been demonstrated to work**.

Largely missing in this coverage was a caveat about the lack of evidence that the technology improved patient outcomes, lowered costs, or provided some other benefit — something we demand in reporting on drugs, devices and tests.

"Reporters are often susceptible to PR hype about the potential of new technology – from Watson to 'wearables' – to improve outcomes," Howard said. "A lot of stories would turn out differently if they asked a simple question: 'Where is the evidence?'"

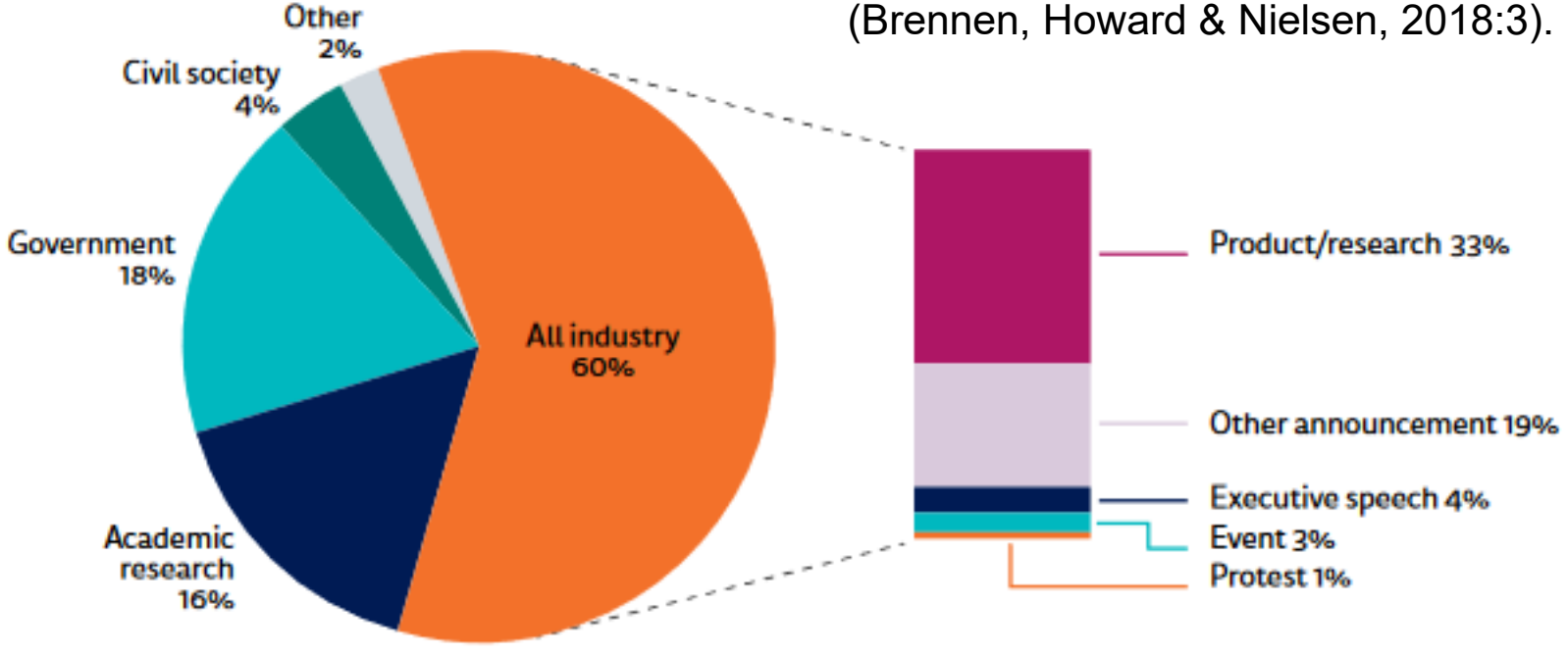
https://www.healthnewsreview.org/2017/02/md-anderson-cancer-centers-ibm-watson-project-fails-journalism-related/?fbclid=IwAR3cWRWK3Mjfpt0O0BuvwofkCKKa8hQmUN6MgFEgf_Re46k9hdlSI6VPBGk

Mediedekningen av AI

- Har betydelig påvirkning på vår offentlige samtale om AI.
- Mediebransjen er preget av nedbemanninger og kutt.
- Oppdrag om å dekke AI gis til journalister som ikke er teknologispesialister/reportere, som har…
- …mindre tid og ressurser til å dekke AI-saker
- Bruker pressemeldinger og andre mindre kildekritiske artikler.
- Industrikilder i dekningen av AI-stoff dominerer nyhetsbildet, finner et 2018-Reuterstudie av 760 nyhetsartikler i 6 engelske aviser (Brennen, Howard & Nielsen, 2018).

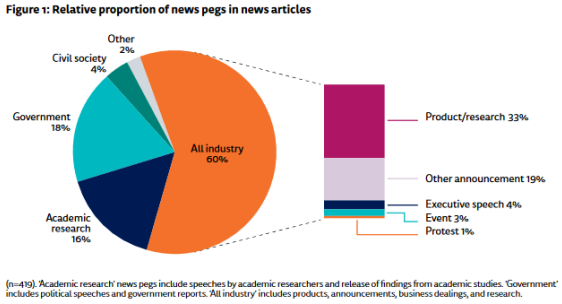
Figure 1: Relative proportion of news pegs in news articles

(Brennen, Howard & Nielsen, 2018:3).



(n=419). 'Academic research' news pegs include speeches by academic researchers and release of findings from academic studies. 'Government' includes political speeches and government reports. 'All industry' includes products, announcements, business dealings, and research.

Brennen, J. S., Howard, P. N., & Nielsen, R. K. (2018). An Industry-Led Debate: How UK Media Cover Artificial Intelligence. *Reuters Institute for the Study of Journalism Fact Sheet,(December)*, 1-10. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2018-12/Brennen_UK_Media_Coverage_of_AI_FINAL.pdf



Hva som omtales av mediene

- Kommentarer eller omtaler av industriprodukter får mest mediedekning og preger nyhetsbildet mest (60% var kodet under denne knaggen) – og får derfor også en betydelig dominerende plass i den offentlige samtalen.
- Storparten av kildene som brukes i sakene er knyttet til industriene/næringslivsaktørene (med Elon Musk som frontfigur) hvor ledelsen i disse selskapene er gjerne de som uttaler seg i sakene.
- Kun *en* (the Guardian) av de 6 nyhetsmediene bruker forskning og forskere som hyppigere kilder enn industrikilder.
- Selv om akademia og myndighetene jevnlig skriver pressemeldinger, ligger industrien et hestehode foran – og har både pressekonferanser, events og storstilte mediekampanjer rundt sine produkter.

(Brennen, Howard & Nielsen, 2018).

Mediedekningen av AI i engelske nyhetsmedier

- Svinger mellom to politiserte og polariserte ytterpunkter

Utopiske drømmer om en arbeidsfri fremtid og evig liv.

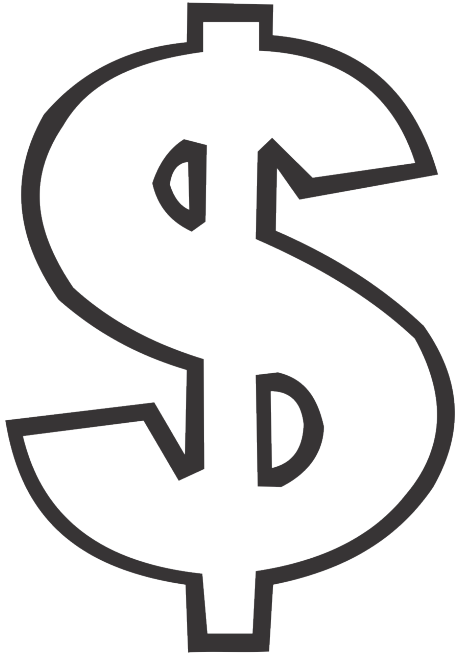
Mediene dekker AI-saker knyttet til økonomi, business og nasjonal sikkerhet.

Dystopiske mareritt om robotopprør og apokalypse.

Mediene dekker AI-saker knyttet til etikk, diskriminering og personvern (fra et arbeidslivs- og sosial rettferdslinse)

(Brennen, Howard & Nielsen, 2018).

- Den dominerende fremstillingen av AI i engelske medier er gitt prioritet til industriinitiativ som posisjonerer AI som både relevante og kompetente løsninger til en rekke problemer og utfordringer.



(Brennen, Howard & Nielsen, 2018).

“Through the manufacturing of hype and promise, the business community has helped produce a rhetoric around these technologies that extends far past the current methodological capabilities” (Elish og boyd, 2017:58)

«Part of what makes the phenomena of Big Data and AI so compelling is the **hyped imagination** of **what is possible**, not **what is realistic**».

(Elish & boyd, 2017:3).

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Situating methods in the magic of Big Data and AI

M. C. Elish [a] and danah boyd [b]

[a]Data & Society Research Institute, New York, NY, USA; [b]Microsoft Research and Data & Society Research Institute, New York, NY, USA

ABSTRACT

"Big Data" and "artificial intelligence" have captured the public imagination and are profoundly shaping social, economic, and political spheres. Through an interrogation of the histories, perceptions, and practices that shape these technologies, we problematize the myths that animate the supposed "magic" of these systems. In the face of an increasingly widespread blind faith in data-driven technologies, we argue for grounding machine learning-based practices and untethering them from hype and fear cycles. One path forward is to develop a rich methodological framework for addressing the strengths and weaknesses of *doing* data analysis. Through provocatively reimagining machine learning as computational ethnography, we invite practitioners to prioritize methodological reflection and recognize that all knowledge work is situated practice.

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KEYWORDS
Methodology; Big Data; AI; machine learning; epistemology; ethnography

> I found that the people who ascribe the most power to statistics and data are not people who do statistics and data science. They are executives who give the vision talks about the power of data. … I've seen so many cringe-inducing assertions … In my head, I'm listening to all these things and am like, I remember that conversation, and the data on which that is based is so utterly flawed and unlikely to be true. But it supports the mythos of this particular executive. So let's just repeat it until it is true. (Hammerbacher 2016, data scientist)

In 2015, the M.D. Anderson Cancer Center in Texas made a bet that IBM Watson was going to play a vital role in the Center's core mission: to eradicate cancer. Both IBM and M.D. Anderson promised that Watson would revolutionize cancer care, allowing for more personalized treatment and enhanced clinical decision-making (IBM News Room, 2013). In the year following its deployment, a scathing University of Texas audit documented organizational and resource mismanagement (University of Texas, 2016), while critics pointed out that the "cognitive intelligence" technology itself overpromised and under-delivered (Jaklevic, 2017). Costing over $62 million, the project was abandoned in early 2017, never having been fully implemented (Ackerman, 2017).

IBM Watson is just one of an emerging class of technologies being branded as "artificial intelligence" (AI). These technologies have risen to prominence in the last year as the latest game-changer in the tech industry. Only a few years ago, the same might have been said about Big Data, and indeed according to a recent *New York Times* article, AI has been dubbed the "new Big Data" in many circles (Hardy, 2016).

CONTACT M. C. Elish mcelish@datasociety.net

"When the Telegraph notes that 'Viagra inventor **aims** to heal "broken" drugs model with AI' (26 July 2018), or that 'Google **is planning** to use satellite imagery to map the "solar potential" of Britain's rooftops' (31 Mar. 2018) it obscures **the distinction between what is actually possible and what is aspirational**. (…) discussions of **the fundamental limitations of AI are comparatively rare** across the corpus" (Brennen, Howard & Nielsen, 2018:5).

BIG DATA, BIG HYPE?

Image: BBVAtech/Flickr

First there was "Big Data," and then there was "Big Data Analytics." These terms are everywhere, but there has been a recent media backlash about the effectiveness of Big Data. Tim Harford summed this up in a recent *Financial Times* article by saying "Big Data has arrived, but big insights have not."

"Big Data has arrived, but big insights have not."

https://www.wired.com/insights/2014/04/big-data-big-hype/#

Takk for meg!

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