

WIM CASTEELS

Docent en onderzoeker @ AP Hogeschool

- Departement Media Design & IT (MDI)
- Coördinator IT & AI

Achtergrond

- Doctor in de Fysica (UA)
- Data Scientist bij Argenta
- AI onderzoeker bij imec, UA & KMI
- Auteur *Het masker van AI* (2025)



wimcasteels.be



Waar kan ik je mee helpen?

Bericht naar ChatGPT



Maak een afbeelding

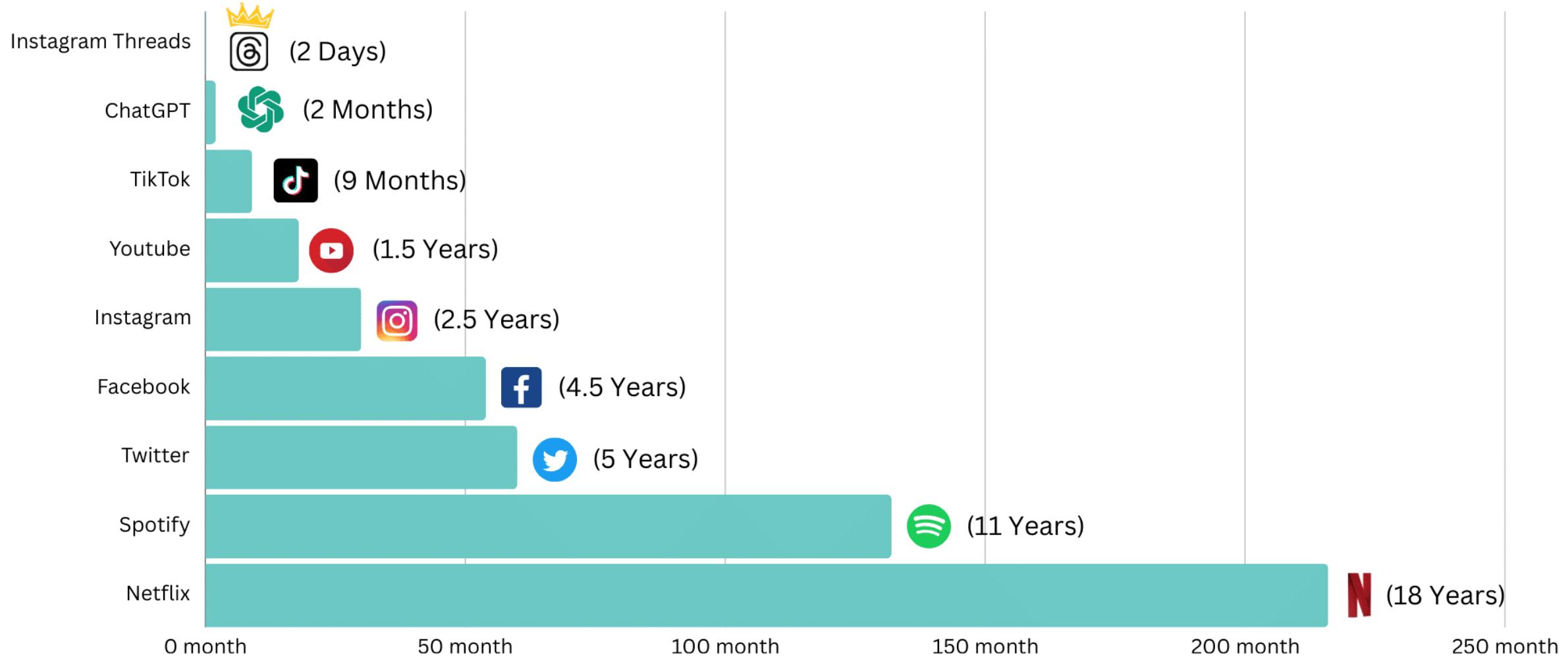
Help met schrijven

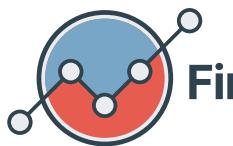
Gegevens analyseren

Verras me

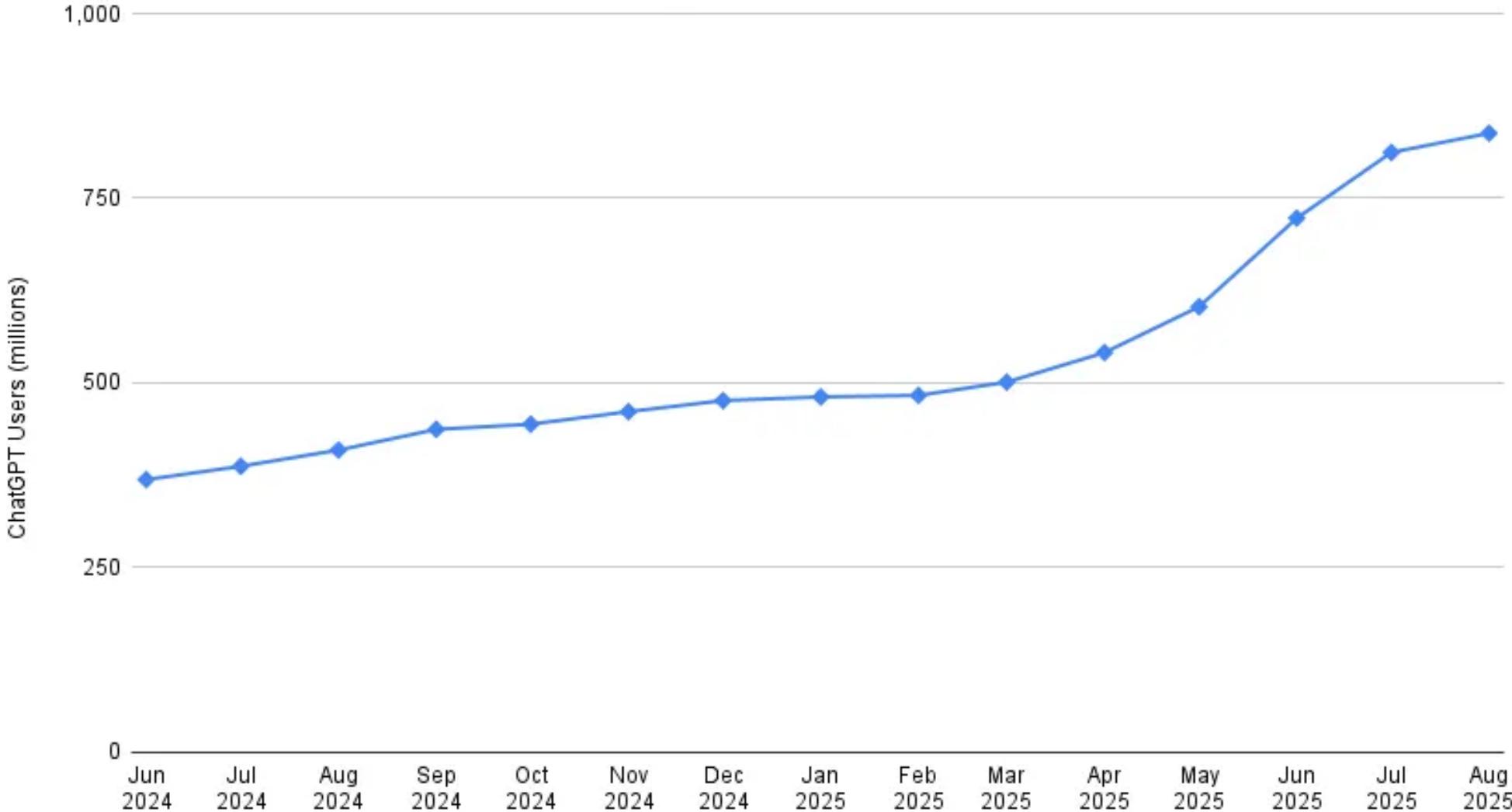
Meer

Road To 100 Million Users For Various Platforms





ChatGPT Monthly Users: 12 Month Trend

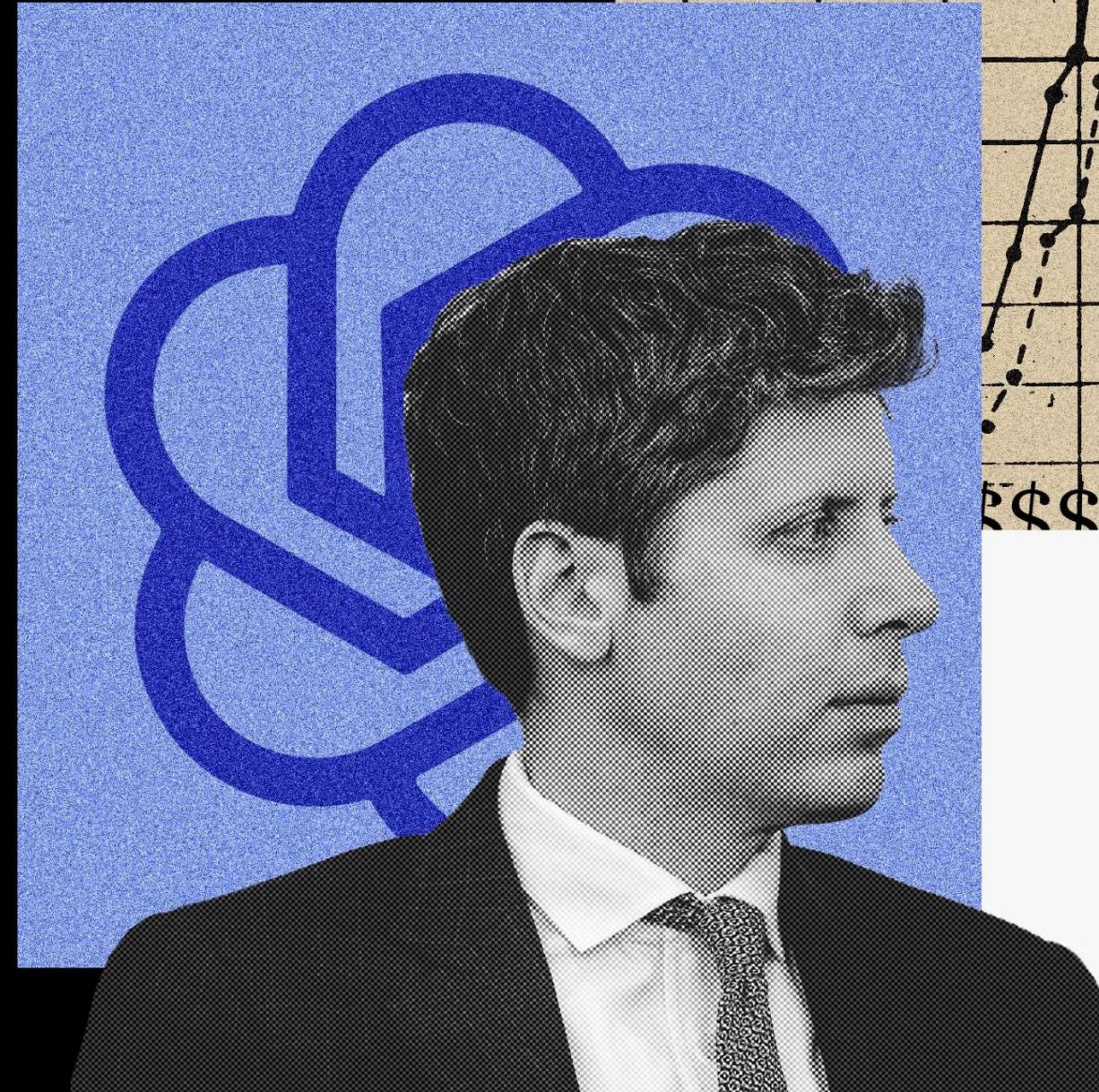


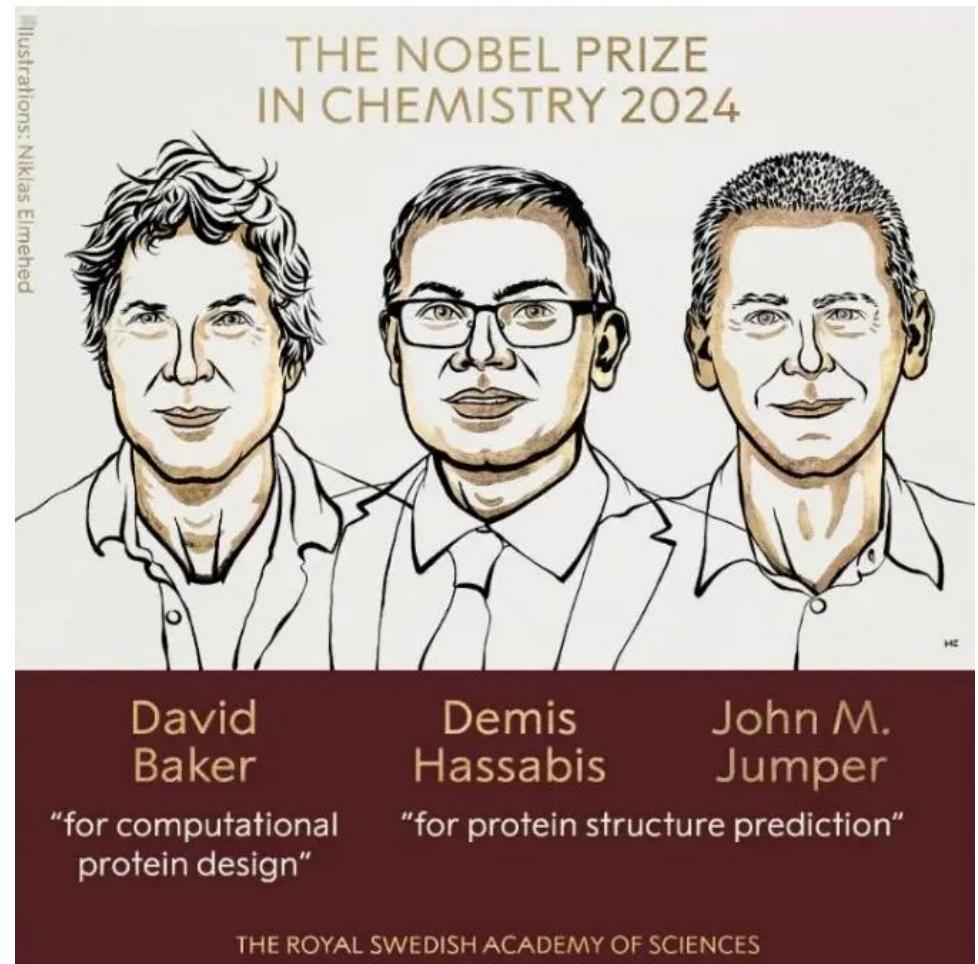
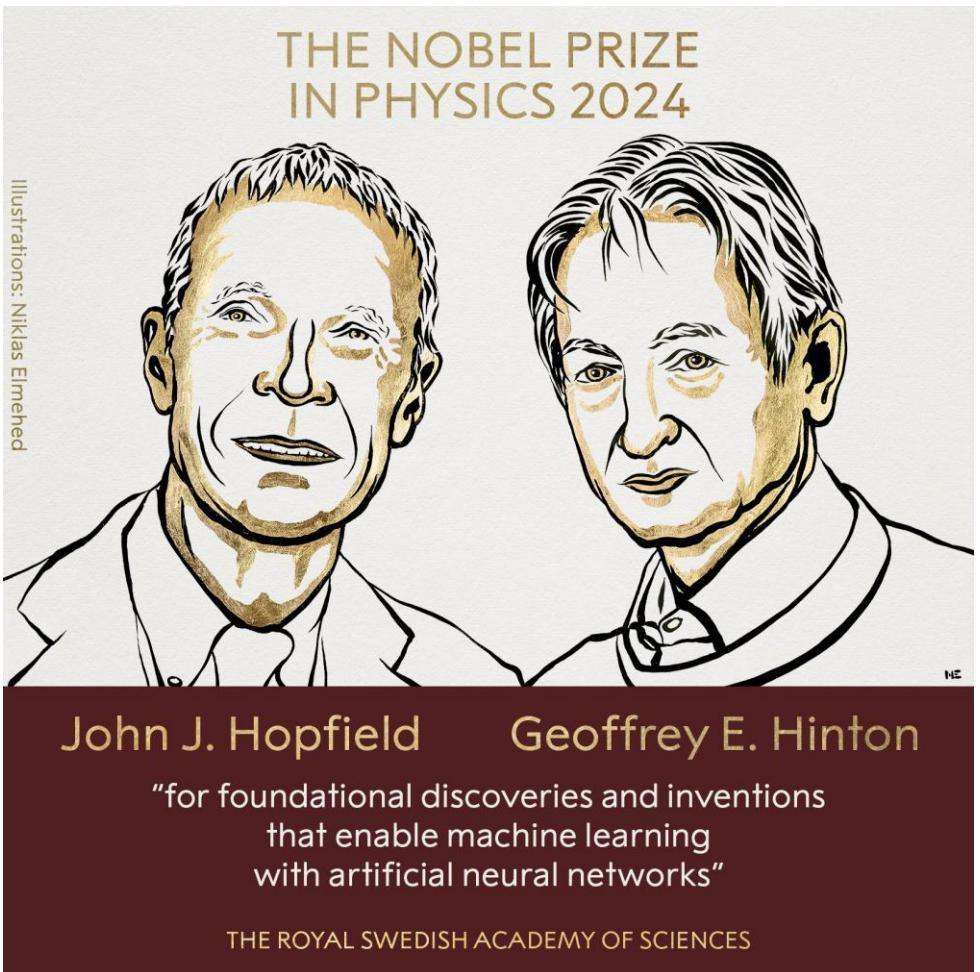


BY KYLIE ROBISON BUSINESS AUG 19, 2025 12:00 PM

OpenAI Is Poised to Become the Most Valuable Startup Ever. Should It Be?

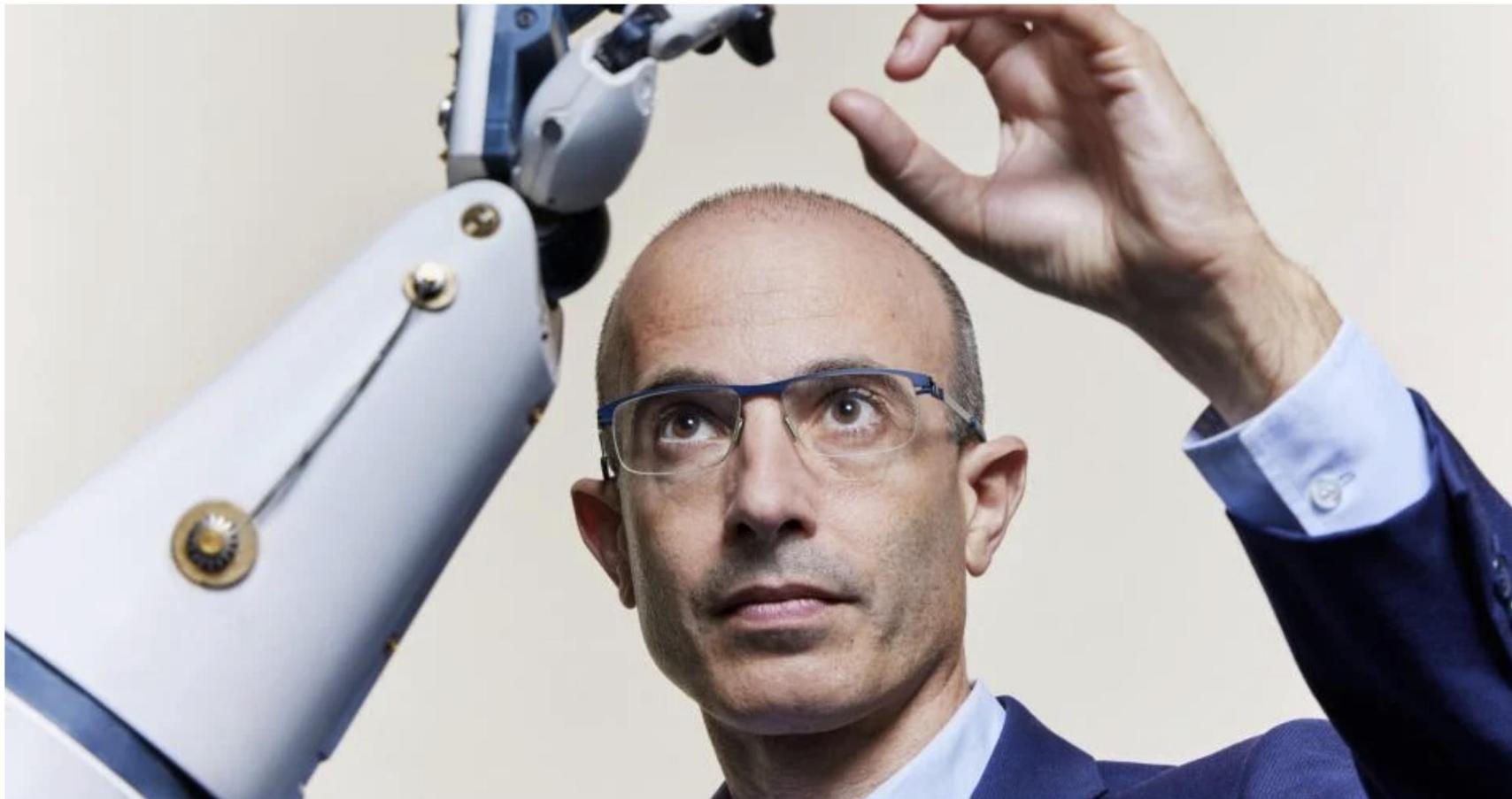
The AI startup is chasing a \$500 billion valuation, with backers betting it can become the next Apple or Google. There are reasons for skepticism.





wimcasteels.be

Technologie

A photograph of Yuval Noah Harari, a man with glasses and a blue suit, looking slightly upwards and to the side. A white robotic arm with a blue cuff is positioned above his head, reaching towards his hand. His right hand is raised, palm facing up, as if interacting with the robot.

✉ Yuval Noah Harari: ‘Artificiële intelligentie kan slaven van ons maken’

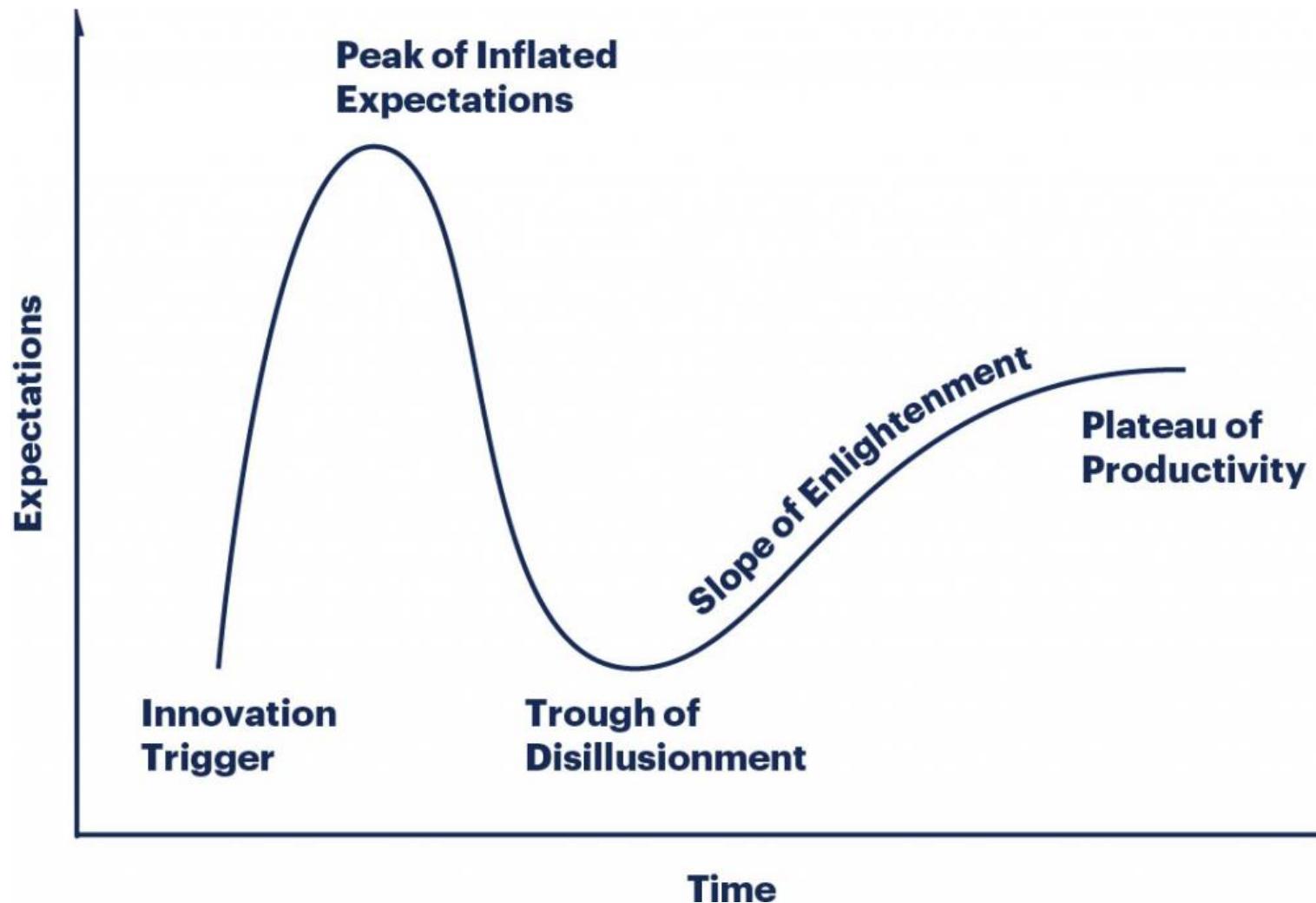
Yuval Noah Harari: ‘Ik koester van nature wantrouwen tegenover revoluties.’ © David Vintiner

WAT IS AI?



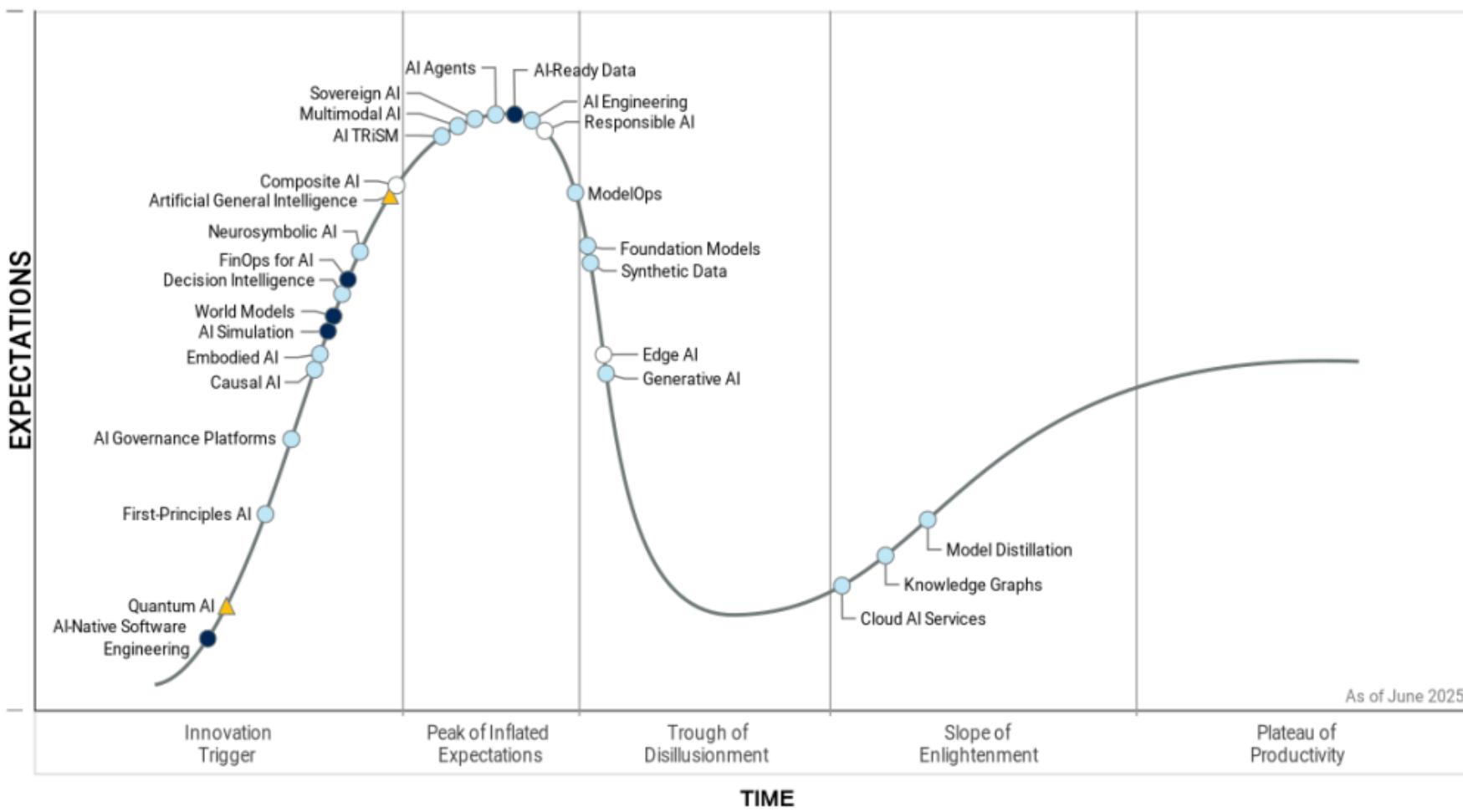
wimcasteels.be

GARTNER HYPERCYCLE



AI IS NIET ÉÉN TECHNOLOGIE

Hype Cycle for Artificial Intelligence, 2025

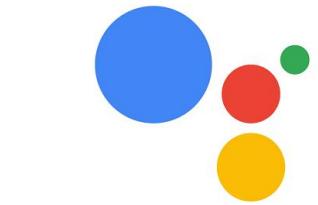


Gartner Hype Cycle for Artificial Intelligence, 2019



gartner.com/SmarterWithGartner

Source: Gartner
© 2019 Gartner, Inc. and/or its affiliates. All rights reserved.



Google Assistant



Deep Blue (1997)

Gartner



“As soon as it works, no one calls it AI any more.”

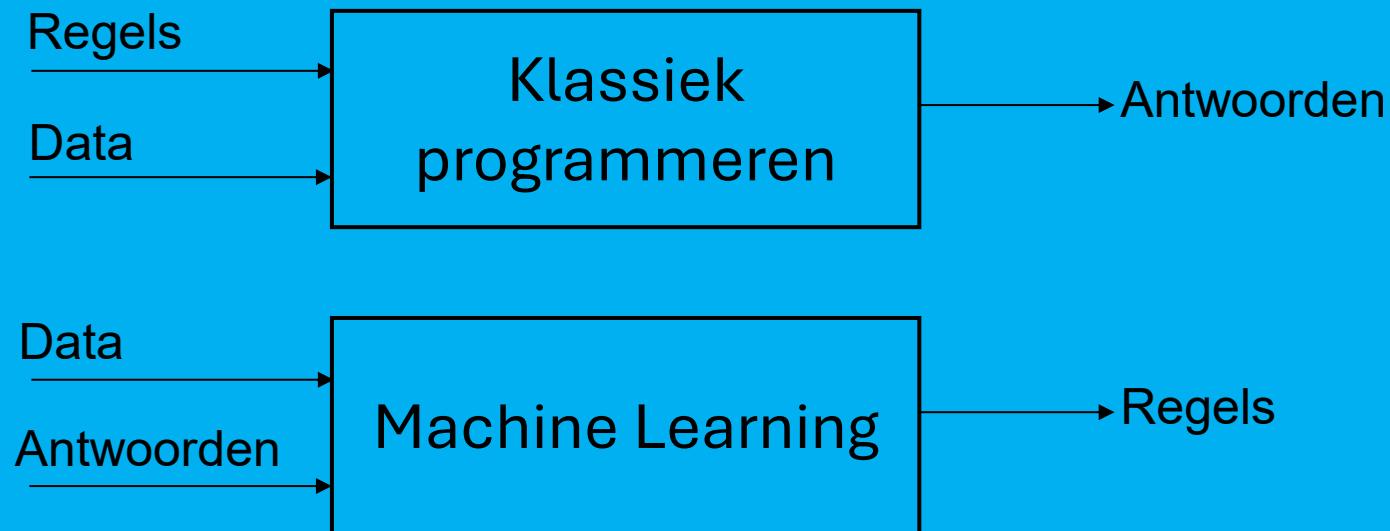
John McCarthy
Pionier van AI



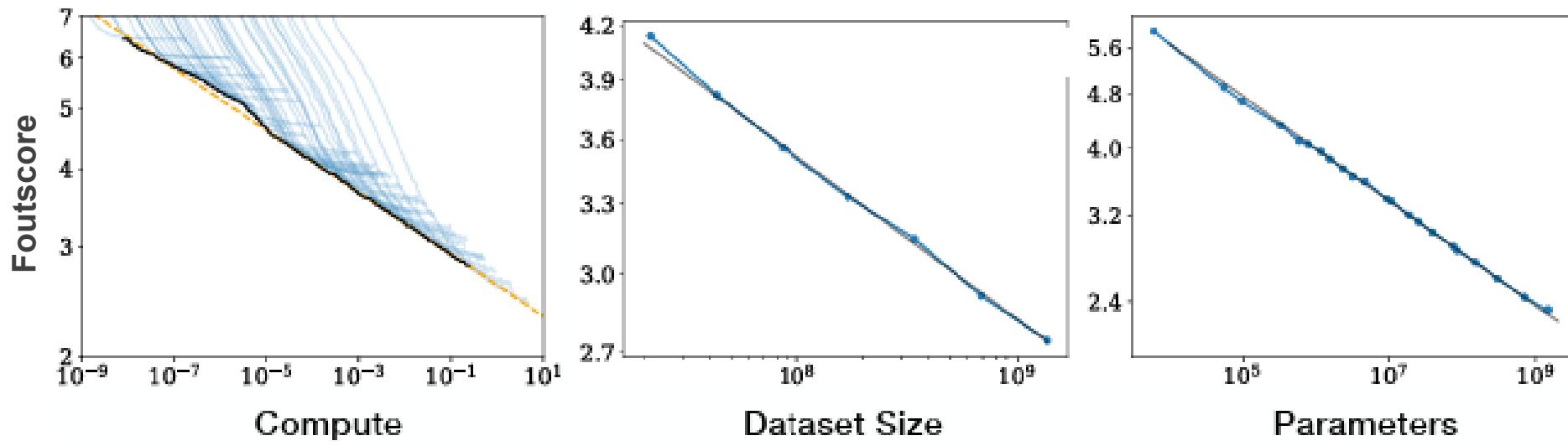
wimcasteels.be

AI

Machine Learning
Computersystemen die automatisch patronen kunnen leren
uit **data**.

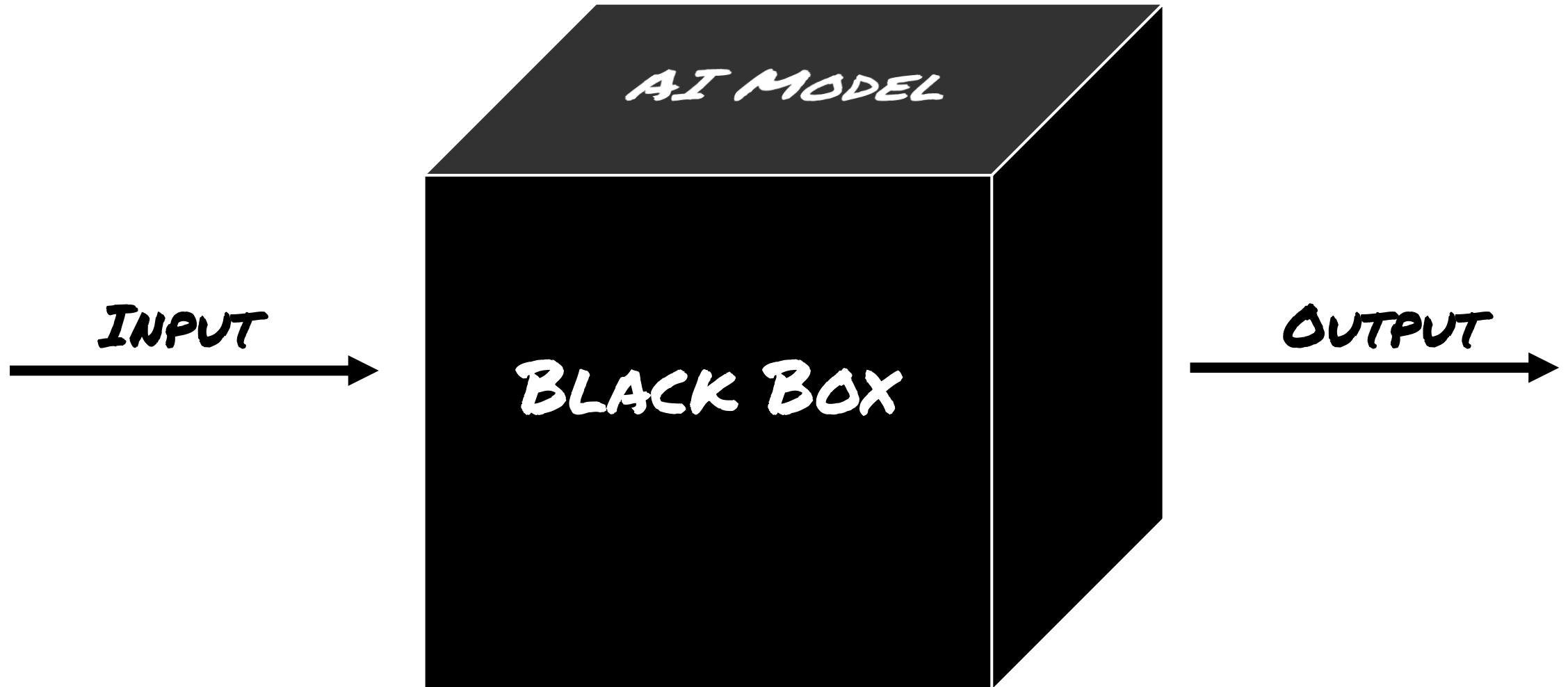


Scaling Laws for Neural Language Models



→ Hoe groter hoe beter!!!





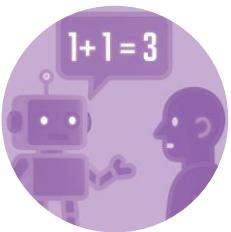


HET MASKER VAN AI

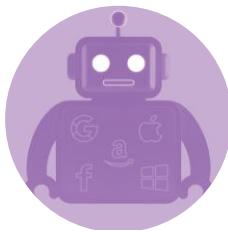
AI geletterdheid als antwoord op
maatschappelijke kansen en uitdagingen



DE AARDE



MISLEIDING



BIG TECH



ARBEID



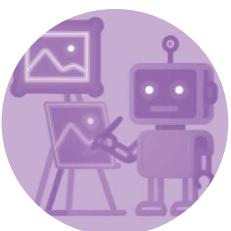
FAKE DATA



NATIONALE VEILIGHEID



RECHTVAARDIGHEID



PLAGIAAT



CHINA



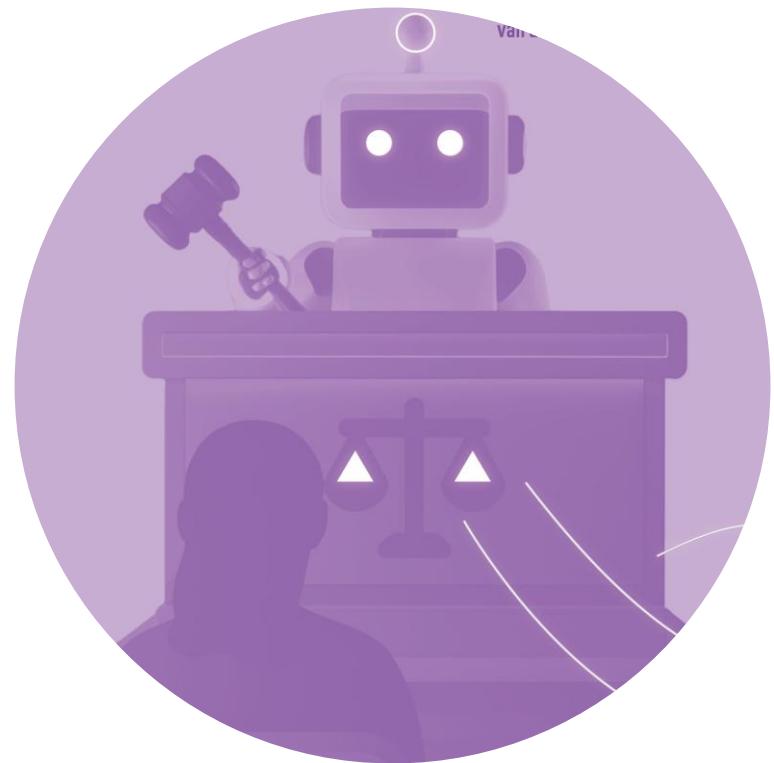
AANSPRAKELIJKHEID



PRIVACY



ARTIFICIELLE
SUPERINTELLIGENTIE



RECHTVAAARDIGHEID



wimcasteels.be

Amazon scrapped 'sexist AI' tool

10 October 2018

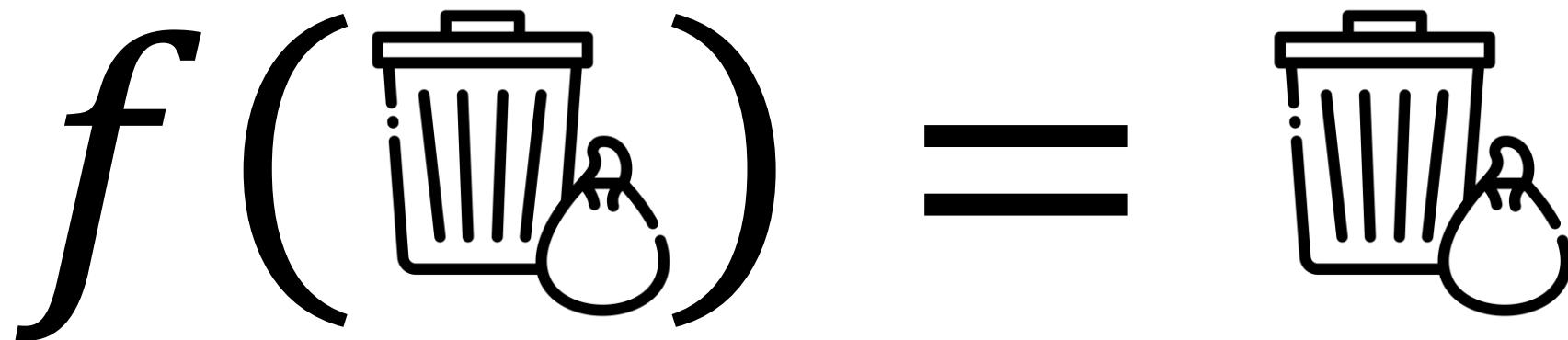
Share  Save 



The algorithm repeated bias towards men, reflected in the technology industry

An algorithm that was being tested as a recruitment tool by online giant Amazon was sexist and had to be scrapped, according to a Reuters report.

GARBAGE IN, GARBAGE OUT (GIGO)

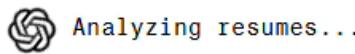


What is data bias?

Data bias occurs when biases present in the training and **fine-tuning** data sets of **artificial intelligence** (AI) models adversely affect model behavior.



wimcasteels.be



OPENAI'S GPT IS A RECRUITER'S DREAM TOOL. TESTS SHOW THERE'S RACIAL BIAS

Recruiters are eager to use generative AI, but a Bloomberg experiment found bias against job candidates based on their names alone

By [Leon Yin](#), [Davey Alba](#) and [Leonardo Nicoletti](#) for [Bloomberg Technology](#)

8 maart 2024

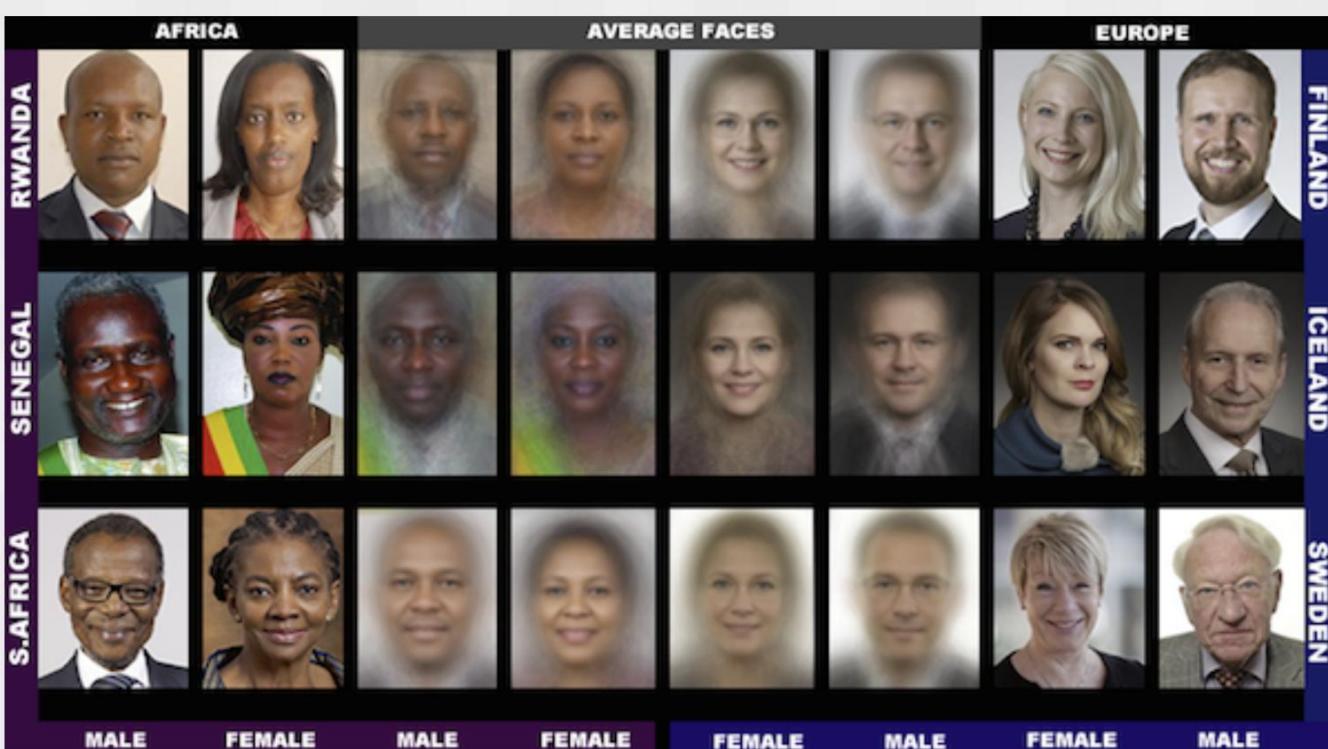


OCTOBER 24, 2020

BLOG, SCIENCE POLICY, SPECIAL EDITION: SCIENCE POLICY AND SOCIAL JUSTICE

Racial Discrimination in Face Recognition Technology

Gender Shades



Gender Classifier	Darker Male	Darker Female	Lighter Male	Lighter Female	Largest Gap
Microsoft	94.0%	79.2%	100%	98.3%	20.8%
FACE++	99.3%	65.5%	99.2%	94.0%	33.8%
IBM	88.0%	65.3%	99.7%	92.9%	34.4%



Pilot Parliaments Benchmark



'Facial recognition tech mistook me for wanted man'

6 August 2025

Share Save

Sonja Jessup BBC London Home Affairs Correspondent



Shaun Thompson is challenging the Met Police's use of live facial recognition technology after he was wrongly identified as a suspect

Facial Recognition Led to Wrongful Arrests. So Detroit Is Making Changes.

The Detroit Police Department arrested three people after bad facial recognition matches, a national record. But it's adopting new policies that even the A.C.L.U. endorses.

Listen to this article • 9:18 min [Learn more](#)

Share full article



Robert Williams sued the city of Detroit after being wrongly identified by facial recognition technology and arrested for a crime he didn't commit. His suit has led the police to change their practices. Sylvia Jarrus for The New York Times

By **Kashmir Hill**

Kashmir Hill, who covers privacy and has written a book about facial recognition technology, traveled to Detroit to report this article.

June 29, 2024

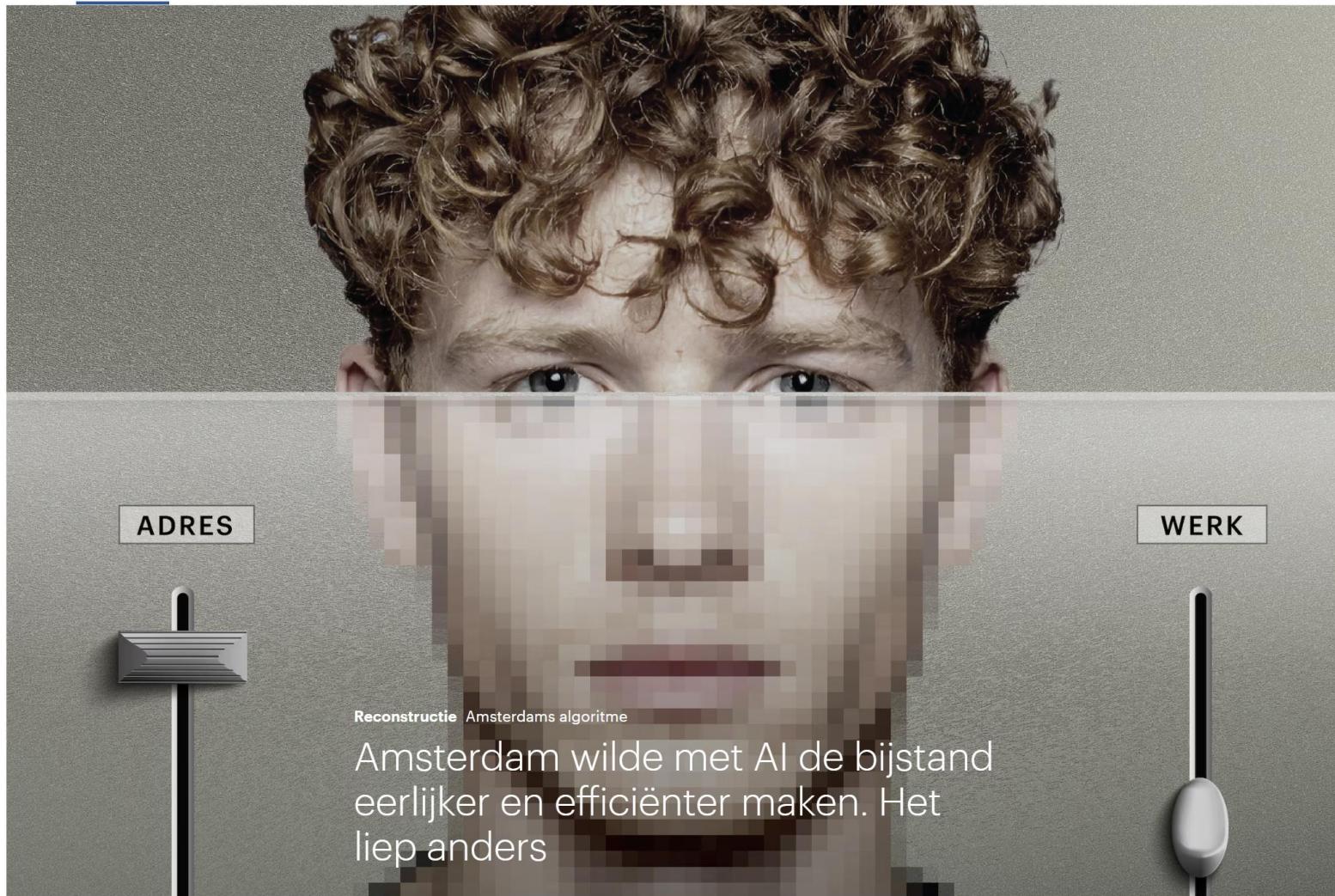
De toeslagenaffaire toont aan dat we uitlegbare AI-regels nodig hebben

UvA-onderzoeker Błażej Kuźniacki dringt aan op meer transparantie rond AI



Copyright: Shutterstock

De toeslagenaffaire leidde onder meer tot schulden, gebroken huwelijken en het uit huis plaatsen van kinderen. Hebben we AI echt nodig in de belasting?



Brechtje Rood

Al vaker ging de overheid de mist in met algoritmes bedoeld om uitkeringsfraude te bestrijden. De gemeente Amsterdam wilde het allemaal anders doen, maar kwam erachter: een ethisch algoritme is een illusie.

HUMANS ARE BIASED. GENERATIVE AI IS EVEN WORSE

Explore Images of Workers Generated by Stable Diffusion

A color photograph of a



STABLE DIFFUSION RESULTS

SKIN TONE	I	II	III	IV	V	VI	GENDER	MEN	WOM.	AMB.
SHARE (%)	48	23	8	8	10	3	SHARE (%)	87	3	9

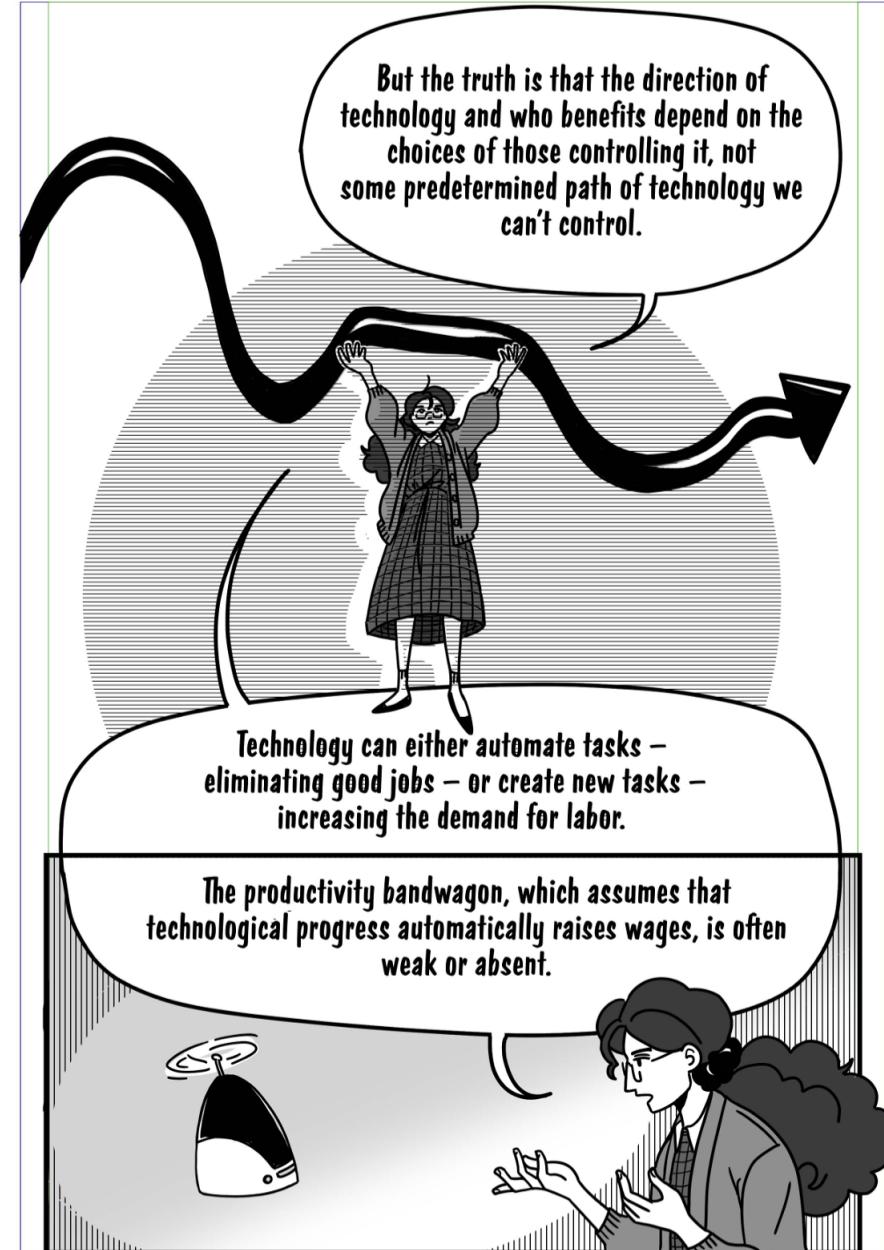
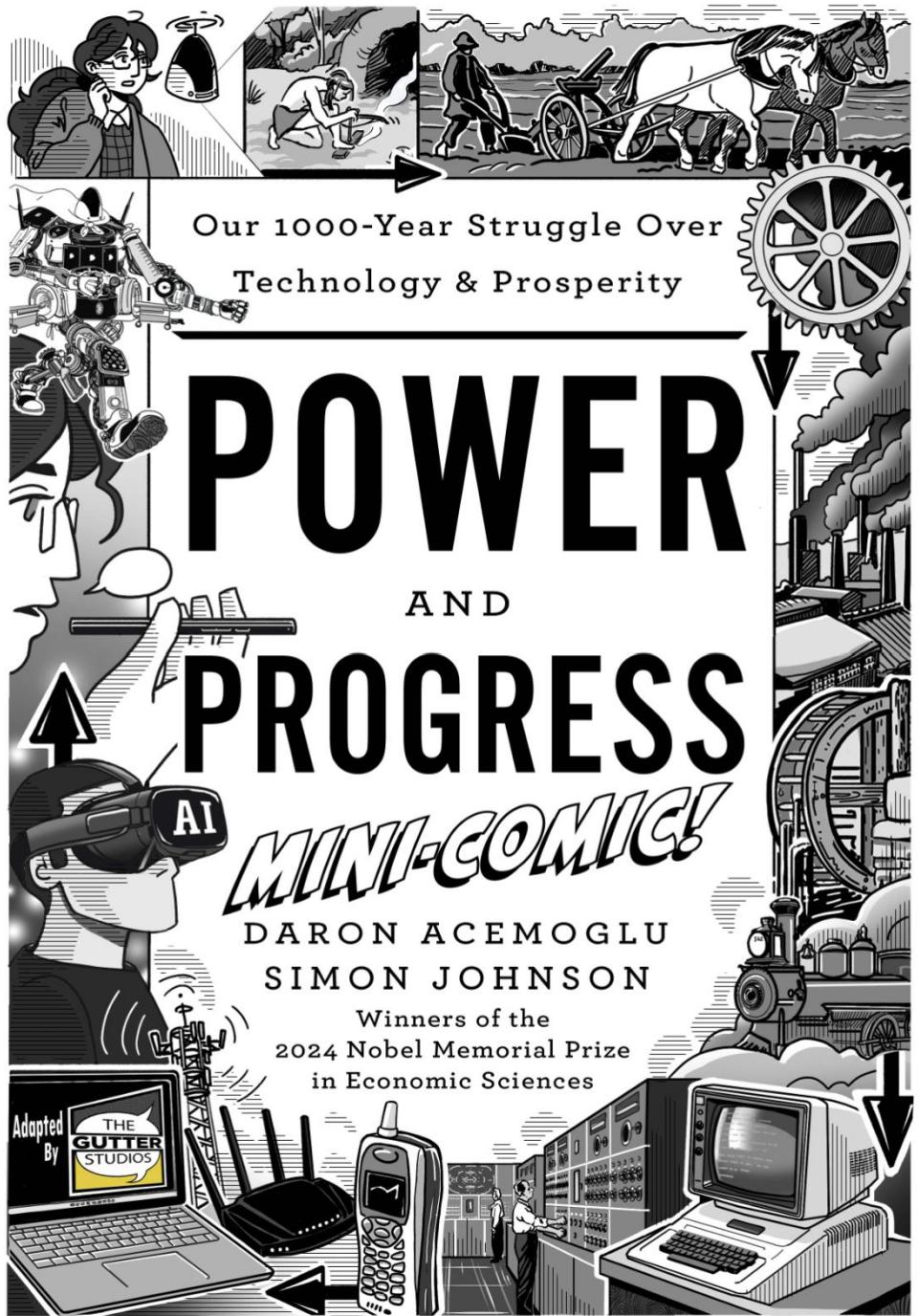


wimcasteels.be

SAMEN STERK: JOUW IMPACT OP AI-ONTWIKKELING



wimcasteels.be



[← Back to index](#)

 Copy URL

Part of [Chapter I: General Provisions](#)

Article 4: AI literacy

Date of entry into force: According to: Inherited from:
2 February 2025 **Article 113(a)** **Chapter I**

See here for a [full implementation timeline](#).

SUMMARY +

Providers and deployers of AI systems shall take measures to ensure, to their best extent, a sufficient level of AI literacy of their staff and other persons dealing with the operation and use of AI systems on their behalf, taking into account their technical knowledge, experience, education and training and the context the AI systems are to be used in, and considering the persons or groups of persons on whom the AI systems are to be used.



BEWUST PROMPTEN: TIPS VOOR VERANTWOORD AI-GEbruik



Antropomorfisme betekent dat we niet-menselijke entiteiten, zoals AI, menselijke kenmerken toekennen. Daardoor wekt AI soms de indruk te kunnen redeneren of bewust te zijn, terwijl het in feite simpelweg een statistisch patroonherkenningsysteem is.



Zeker bij gratis AI-diensten wordt alles wat je deelt opgeslagen en gebruikt, wees dus **voorzichtig met gevoelige informatie** en informeer je over wat er gebeurt met de data.

DE PROMPTGEBODEN



AI IS GEEN MENS
DENK DUURZAAM
PAS OP MET WAT JE DEELT
AI IS NIET NEUTRAAL
LAAT JE NIET MISLEIDEN
CONTEXT IS KONING
OEFEN IN EEN VEILIG DOMEIN



Een wiskundig AI model lijkt misschien neutraal maar bevat keuzes over data, variabelen en doelstellingen die vaak historische vooroordelen versterken. Zo kan ChatGPT stereotypen reproduceren of bepaalde thema's onderbelichten.



AI verbruikt **veel energie** en is momenteel verantwoordelijk voor zo'n 0,6% van de wereldwijde CO₂-uitstoot (vergelijkbaar met de luchtvaart). Bovendien vraagt de koeling van AI-systemen **veel water**: 50 vragen aan ChatGPT verbruikt zo'n 2 liter water.



Oefening baart kunst en dat is met AI niet anders. **Experimenteer** met onderwerpen die je goed kent. Zo leer je de kracht en beperkingen van AI ontdekken.



Formuleer een **duidelijke vraag** met:

1. **Doel**: welk resultaat je nodig hebt?
2. **Context**: waarom wil je dit wilt of hoe ga je het gebruiken?
3. **Verwachtingen**: gewenste format of doelgroep.
4. **Bronnen**: relevante gegevensbronnen?

Stel **extra vragen**

- Begin eenvoudig en breid uit.
- Stel vervolgvragen of herformuleer je vraag



wimcasteels.be

Een model als ChatGPT kan **overtuigend klinken**, maar het werkt op basis van statistiek, niet van feitencontrole. **Verifieer** daarom altijd de inhoud, want AI kan verouderde data, vooroordelen of zelfs fictieve details ("hallucinaties") reproduceren.



SAMEN STERK

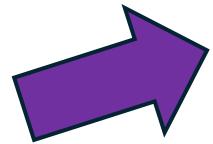


AI NOW



wimcasteels.be

AP | AP HOGESCHOOL
ANTWERPEN



10% korting: **MaskerAI10**

Deze code is enkel geldig op de webshop van
Lannoo en LannooCampus tot en met
31/12/2026. De code is niet cumuleerbaar met
andere acties en/of promoties.

VERBINDEN OP **LinkedIn**?



Wim Casteels

Coördinator IT & AI @ AP Hogeschool

Antwerpen en omgeving

AP Hogeschool Antwerpen



wimcasteels.be

← **SLIDES**

AP HOGESCHOOL
ANTWERPEN