Preben Mejer

preben@mejer.com
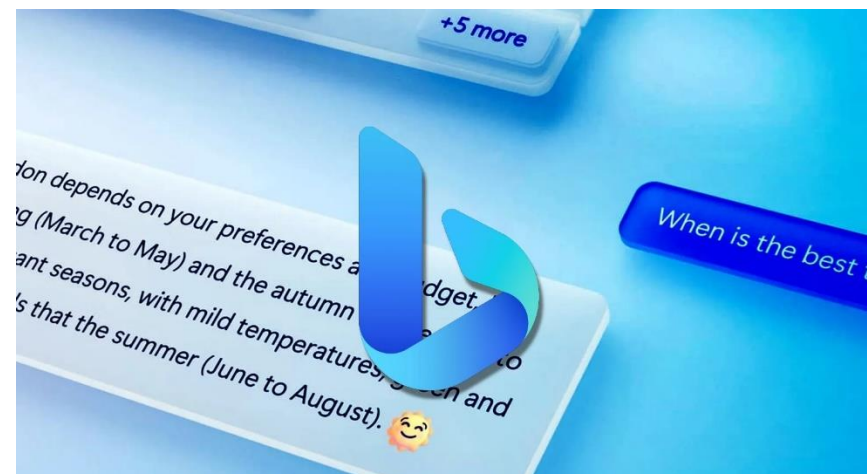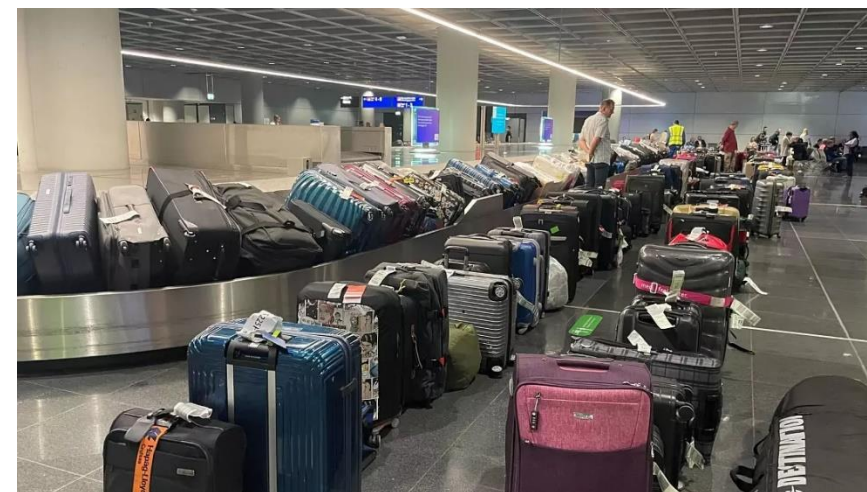
AI – Kunstig intelligens
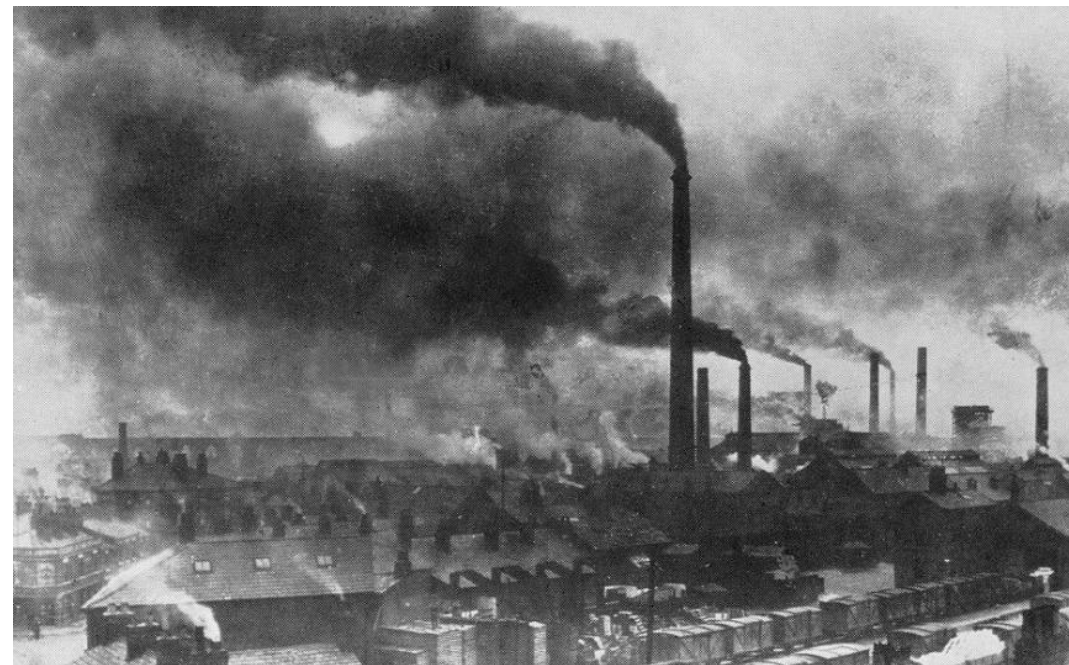
- Personal Computing
- Internet
- AI McKinsey

AI i din hverdag

- Låneansøgning på minutter i stedet for dage
- Kastrup bagage kapacitet fordoblet
- KLM mail ryger direkte i Outlook kalender
- Tesla ladeoptimering
- BingChat

Industrialiseringen gav os ...

- Tidszoner
- Hierarkiske organisationer
- Fabrikker
- Forbrug – købe for at eje – ting, masser af ting

- WEF
- Dampmaskinen gav de vestlige lande 0.3 pct GDP årlig tilvækst
- IT og Internet 0.6 pct
- AI har potentiale til 1.3 pct

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Milestone Tech and Labour productivity booms

- 10-20 år fra lancering til 50 pct udbredelse og produktivitets spring
  - ChatGPT and what follows may be for the 2030's - Paul Krugman WSJ

Exhibit 12: Previous Milestone Technologies Have Led to Labor Productivity Booms, but the Timing Is Hard to Predict
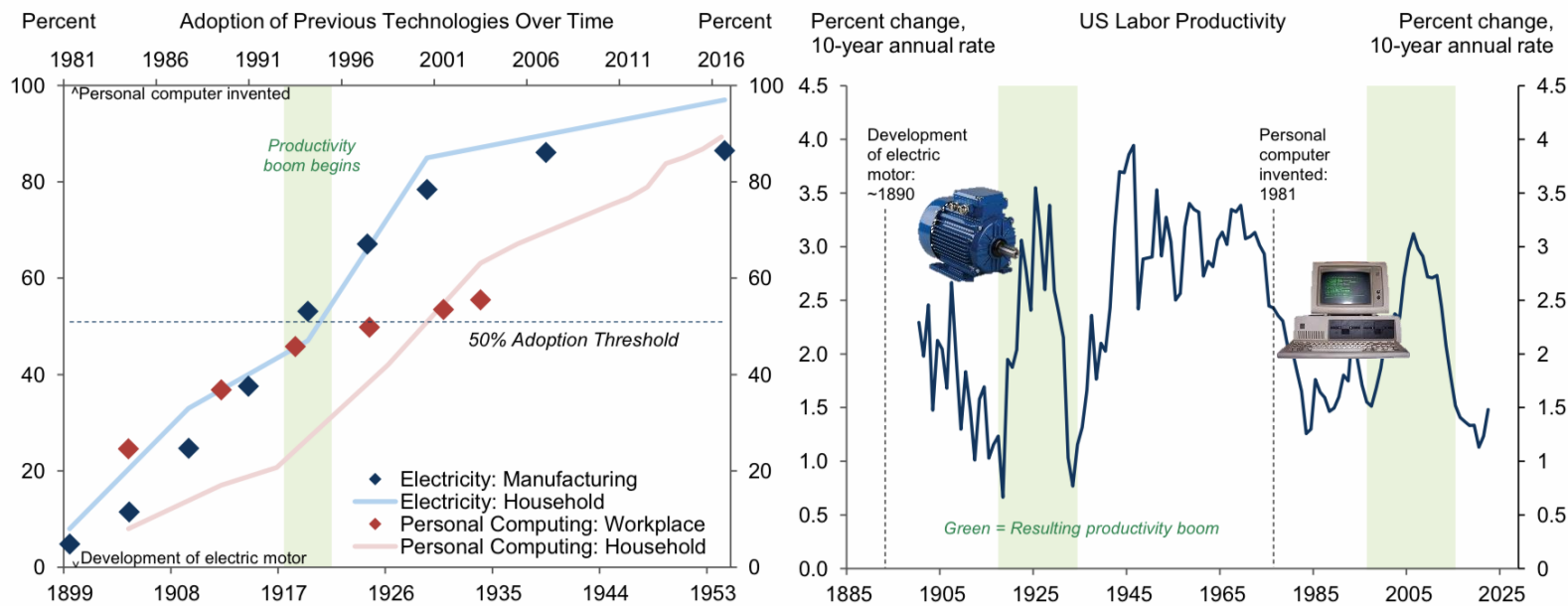
Source: US Bureau of Labor Statistics, Census Bureau, Our World in Data, Woolf (1987), Haver Analytics, Goldman Sachs Global Investment Research
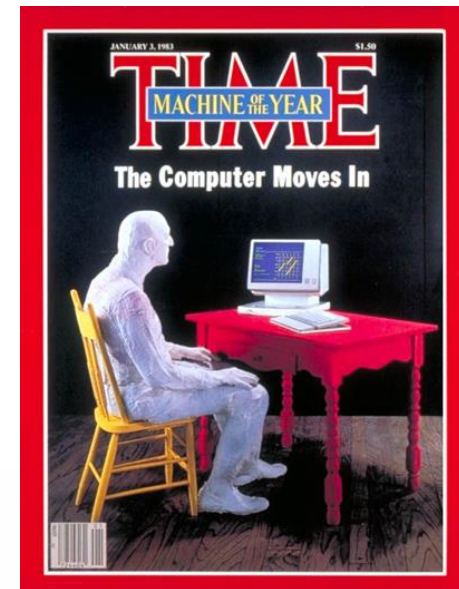
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  - ChatGPT and what follows may be for the 2030's - Paul Krugman WSJ
  - Og dog … PC'en 2 år for første mio solgt, ChatGPT 5 dage ….

Time different services took to reach 1 Million users. If you had any doubts that ChatGPT is going to change the way we use the Internet, look at this graph again …
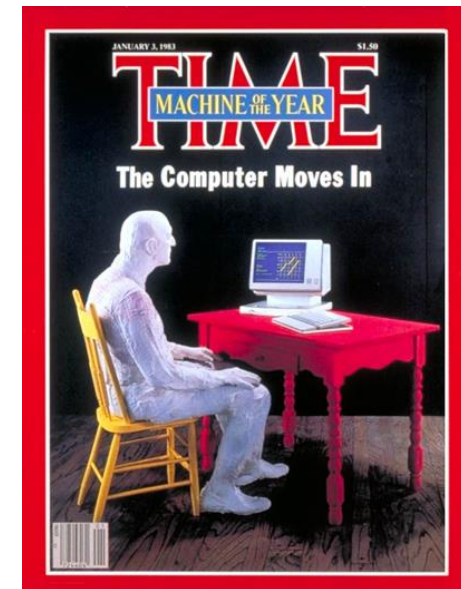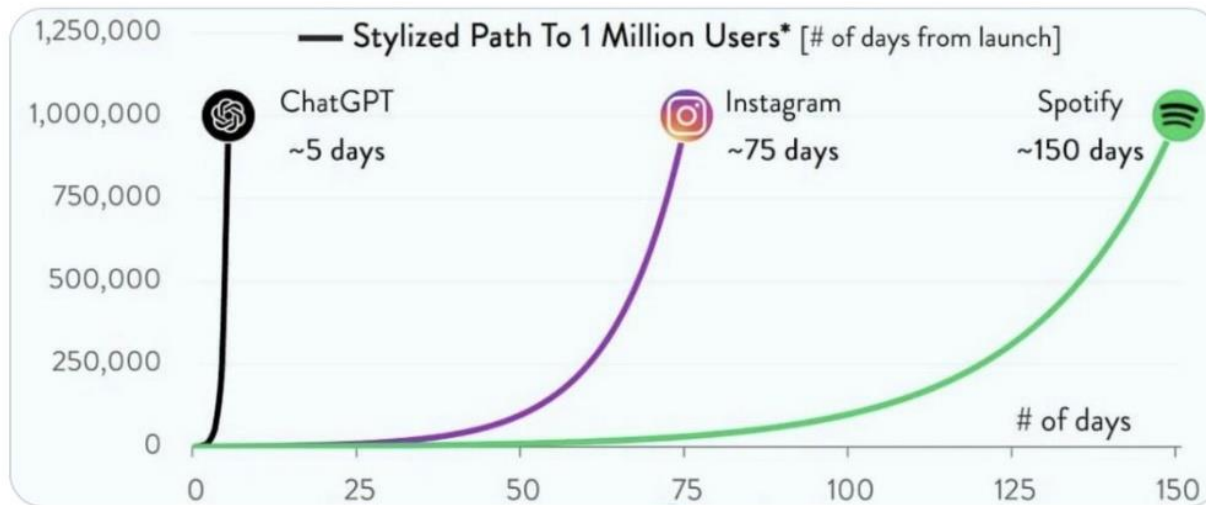
AI – Kunstig intelligens

- Above Imagination
- Nogle af de vildere ting....

AI – nu
Ingen havde drømt om...

- Kreativitet
  - Skabe kunst, mærkværdigheder og video

Dall-E, Meta, ControlNET

AI – nu
Ingen havde drømt om…

- **Kreativitet**
  - Skabe kunst, mærkværdigheder og video

- **Udødelighed**
  - Chat med Winston Churchill

Character AI – chatbots that can imitate the conversational style of anybody

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AI – nu
Ingen havde drømt om…

- **Kreativitet**
  - Skabe kunst, mærkværdigheder og video

- **Udødelighed**
  - Chat med Winston Churchill

- **Sprog – som aldrig før**
  - Talking to whales

To communicate with a whale in 2026
Exchange ideas and experiences
CETI – Cetacean Translation Initiative

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- **Udødelighed**
  - Chat med Winston Churchill

- **Sprog – som aldrig før**
  - Talking to whales

- **Kombinationsevne – som aldrig før**
  - Recipes from fridge

ChatGPT
Several recipes
Fruit salad, cheese omelette, ham and cheese sandwich
Fruit smoothie
For each of the items an easy recipe to whip them up

AI – nu
Ingen havde drømt om...

- **Kreativitet**
  - Skabe kunst, mærkværdigheder og video

- **Udødelighed**
  - Chat med Winston Churchill

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  - Recipes from fridge picture

- **Turbo på bevægeapparatet**
  - Hoppende robotter

Boston Dynamics Atlas
Can run, jump, pick up and throw heavy objects

AI – nu
Ingen havde drømt om…

- **Kreativitet**
  - Skabe kunst, mærkværdigheder og video
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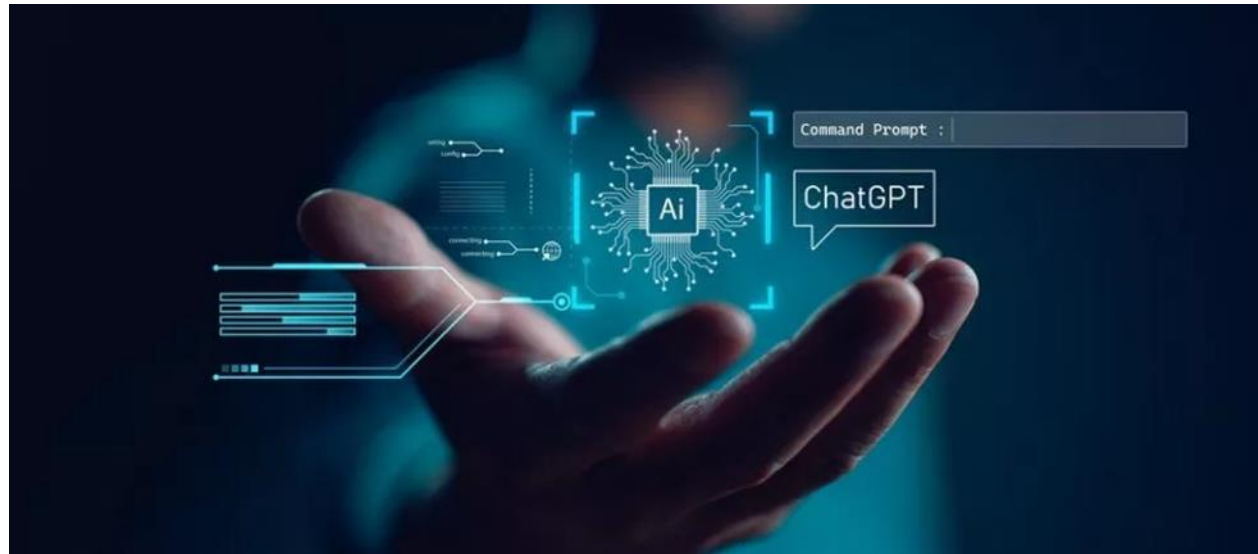- **Turbo på bevægeapparatet**
  - Hoppende robotter
- **Glem IT som vi kender det**
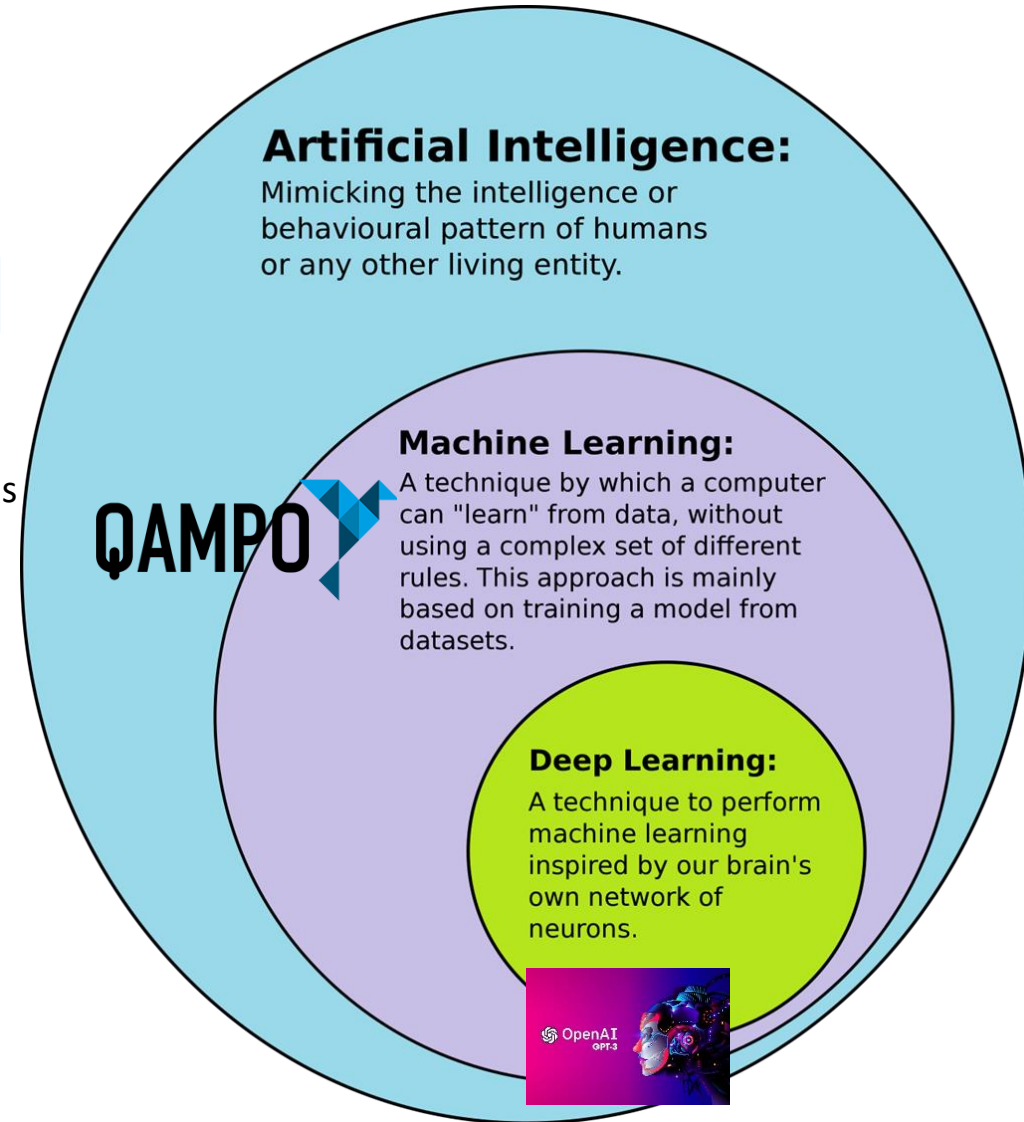 - AI baseret betjening = paradigmeskifte

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AI typer

- **Machine learning**
  - Machine learning algorithms based on data make predictions or decisions
- Deep learning
  - Based on neural (brain like) networks
  - Learn on data that for specific task – images for object recognition
- Generative AI
- Generative adversarial networks
  - Two neural networks, one generating new data, one evaluating
  - Generator and discriminator work together, end result look like real data
- GPT4 – Generative pretrained transformer
  - Pretrained on 175b parameters – internet – 2021 data (GPT3)
  - Transformer – can weight the significance of each part of input data
    - (BERT invented by Google)
  - Predict the next best word in a sentence
    - The first person to walk on the moon was…. Neil Armstrong
    - Images or face created based on existing
    - Any kind of text, news, poetry or translation based on 175b parameter base
    - Audio, music, sound effects, voice acting based on existing – A new Beatles album ?

Artificial Intelligence:
Mimicking the intelligence or behavioural pattern of humans or any other living entity.

Machine Learning:
A technique by which a computer can "learn" from data, without using a complex set of different rules. This approach is mainly based on training a model from datasets.

Deep Learning:
A technique to perform machine learning inspired by our brain's own network of neurons.

QAMPO

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Automatisering
Diesel skurke & Dr Watson

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AI - Qampo

- Qampo – Machine Learning
  - Decision science
  - Ressource/logistik optimering

  - Optimizing airport flow
  - Scheduling - staff, timetable
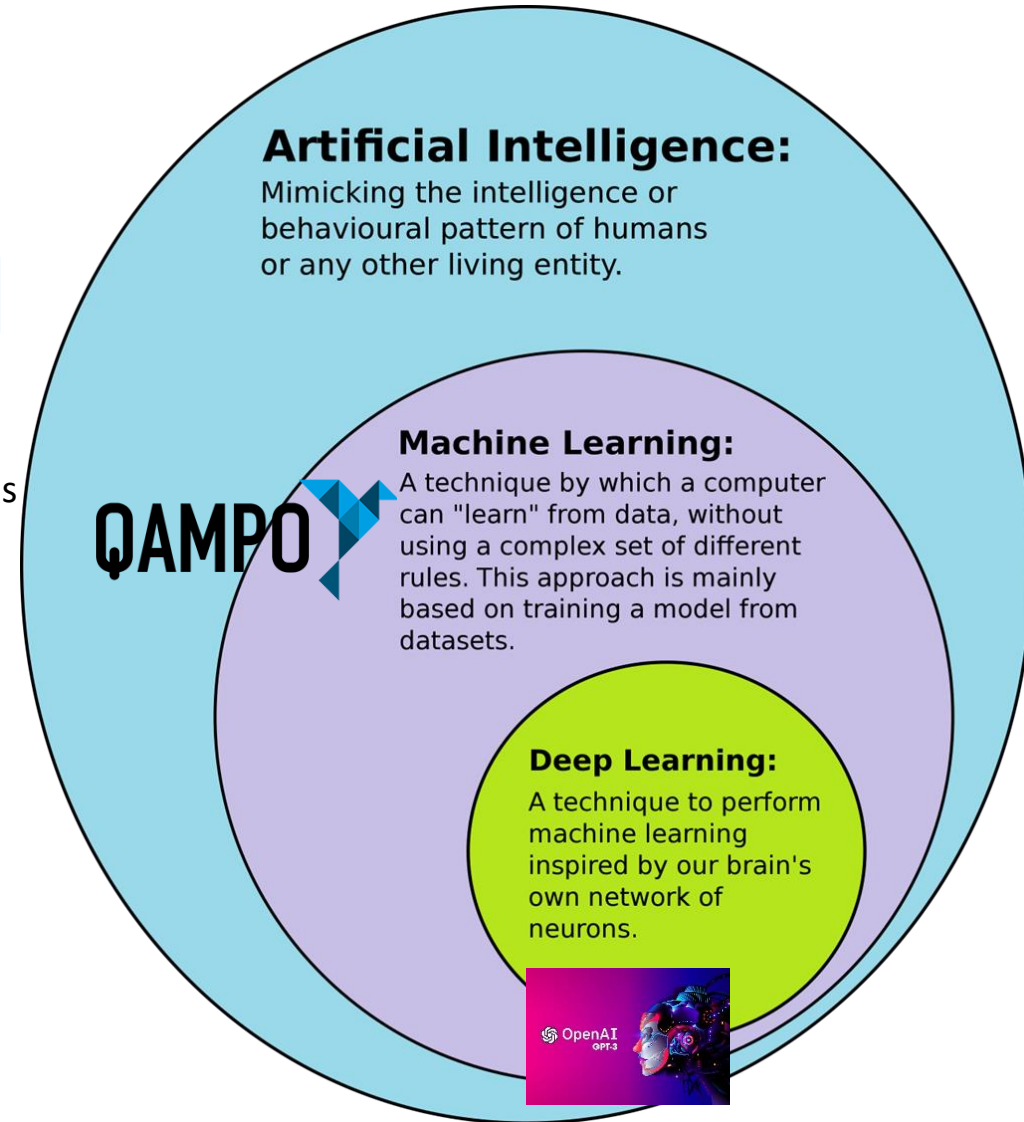 - Teknikerbiler
  - Hjemmepleje

AI typer

Midjourney

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OpenAI GPT-3

RadrLab

AI – Deep Learning

- Neurale netværk
  - Struktur som menneskelige hjerne – 3 lag el flere
  - Flere ovenpå hinanden, klassificerer millioner af emner/objekter/data
  - Kan programmere sig selv
  - Facebooks Deepface AI ansigtsgenkendelses i 9 lag.
  - Clearview face recognition AI
    - 10 mia fotos, ansigtsgenkendelse
    - Vkontakte, russisk Facebook – og Facebook
    - Bruges nu af Ukraine på døde/sårede russiske soldater
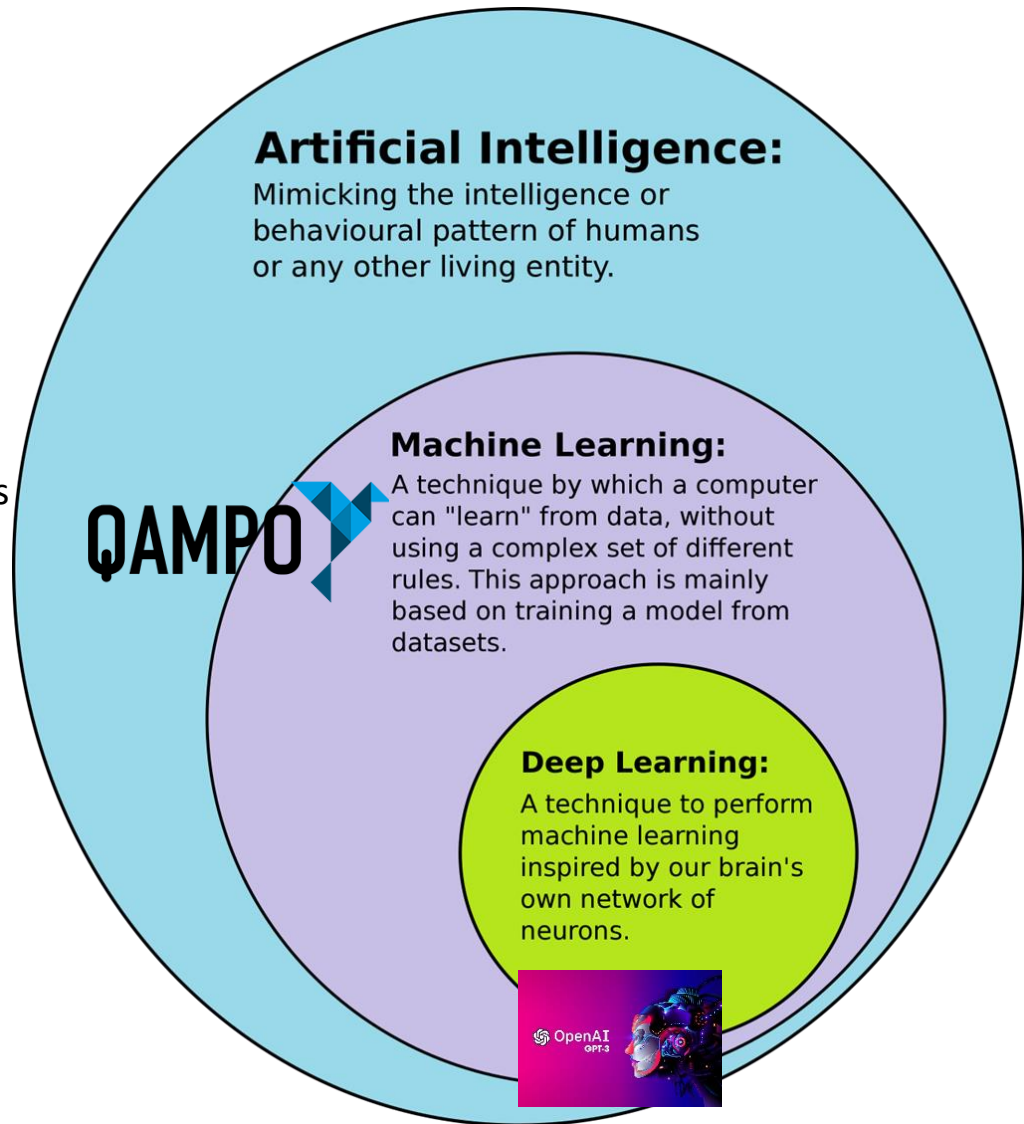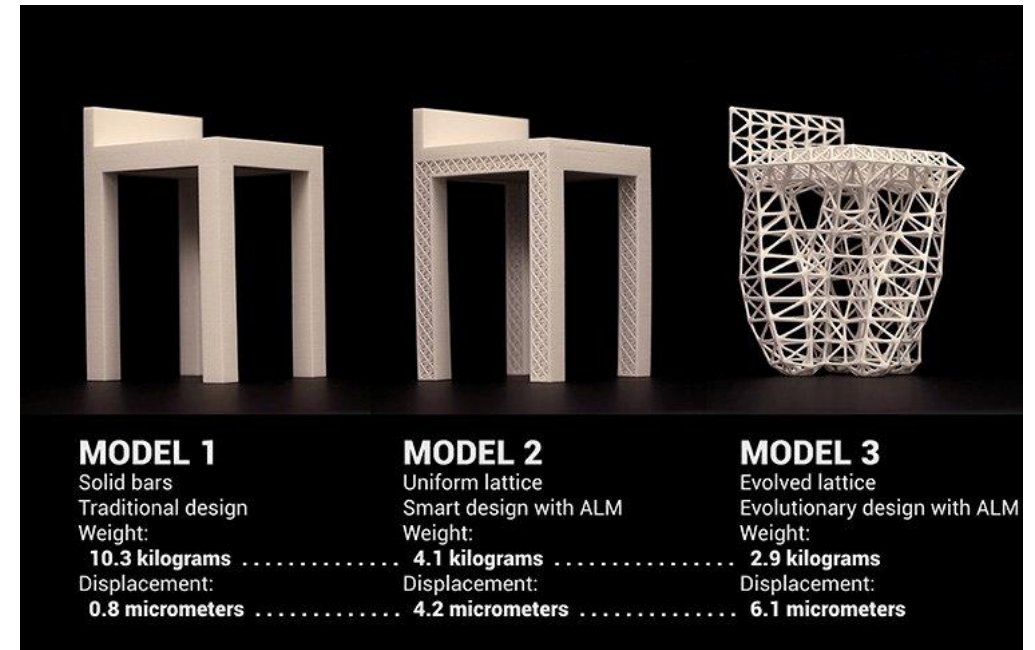
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OpenAI GPT-3

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AI Generative design

- Fortæl computeren hvad du gerne vil designe og hvad det skal koste hvor meget det skal kunne holde til
- Autodesk generative design algoritme kommer op med forslag
- I stedet for at designe elementet er designeren kurator der udvælger og selektrer
- Autodesk generative design is based on natures own R&D and biomimitic
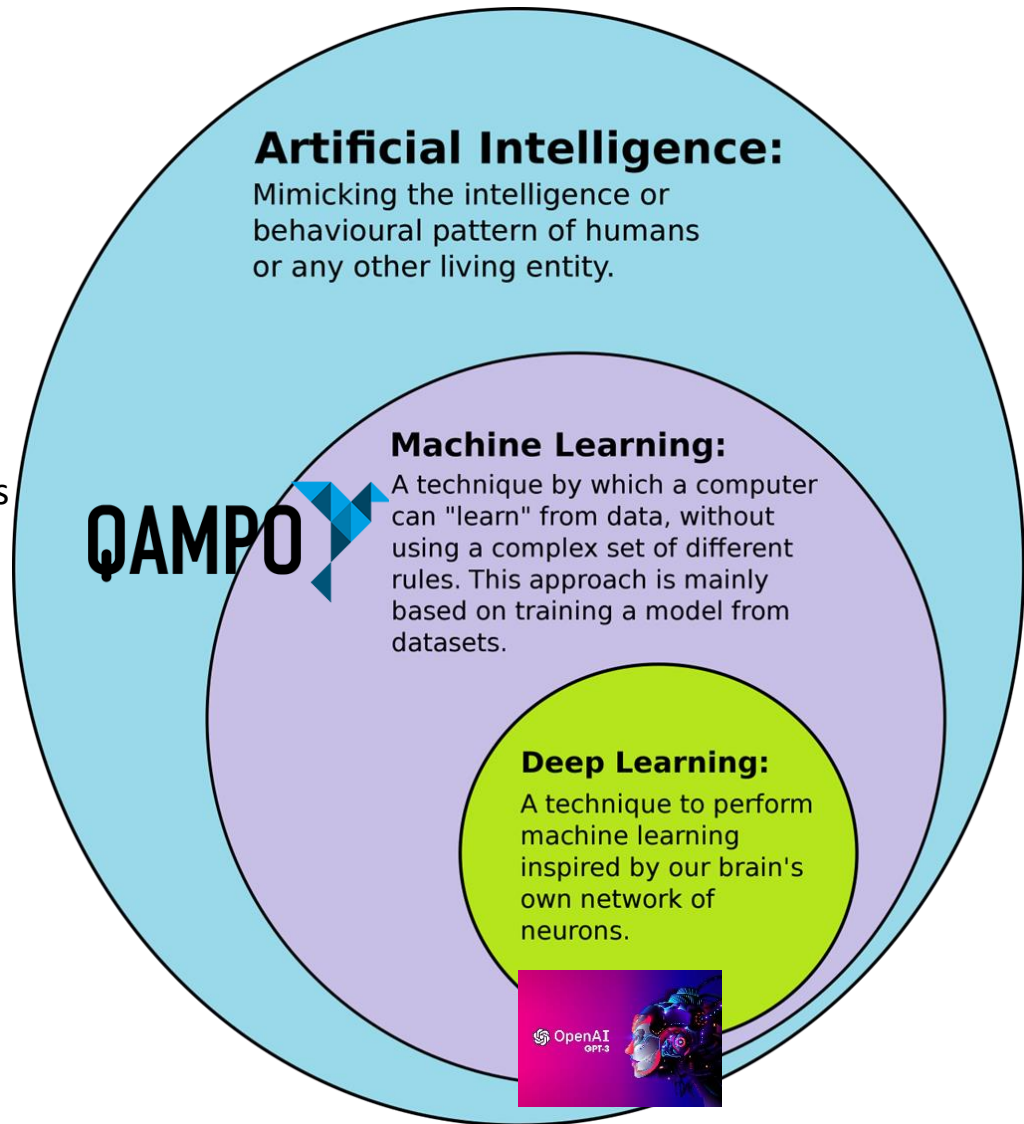- Autodesk

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OpenAI GPT-3

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"Creative" AI

- Dall-E2 – Art generator
  - Creating original, realistic images from a text description
  - Combine concepts, attributes and styles
    - Midjourney (- independent - Leap Motion), probably Stable Diffusion underlying tech
      - Dream Studio – Stable Diffusion – open source, Heidelberg/Munich universities and others

Jason Allen "Théâtre D'opéra Spatial,"

- Diffusion Models are generative models
  - Like text prediction, building pixel by pixel
  - Reduce data to noise and, make a new picture as a probable outcome of input
  - The relationality of pixels (colours, density, intensity) groups of pixels and larger architectures
    - Carlos Perez, much more efficient than GAN

- Riffusion
  - AI Music Generation – Stable Diffusion used to generate spectrograms, converted into an audio signal

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Meep Meep

- GPT3 est 314 petaflops Metaculus

- Google, Microsoft mfl

- Floating point operations per second
  - Apple M2 = 3.6 tera flops GPT3 = 3-500.000 x Apple M2
  - 0.33 flop = IBM PC 1981 = Europe+ in footprint to make GPT3 compute (BingChat)

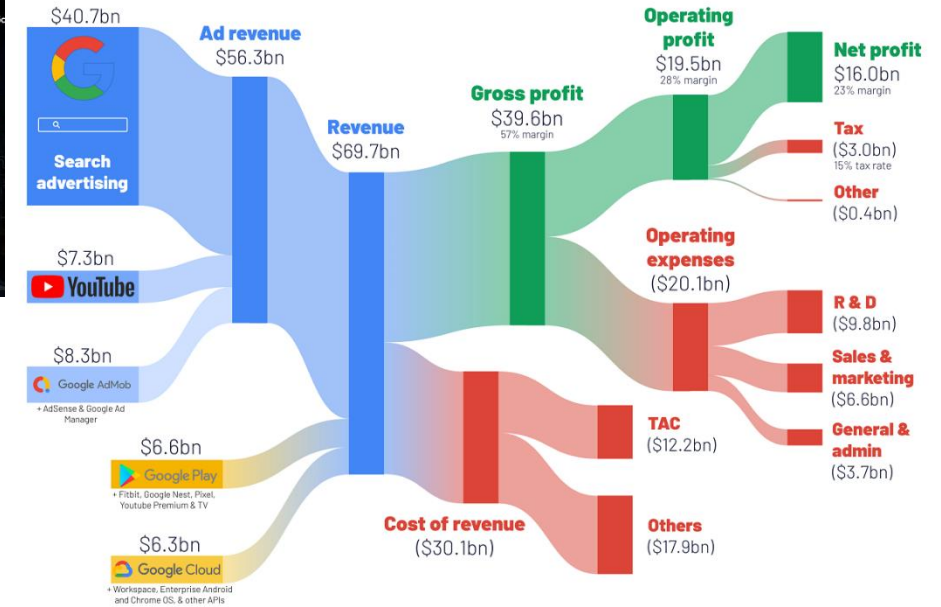- EU LUMI 550 petaflops
  - Global no 3

Petaflophouses
Computing power used in training AI systems
Selected systems, by creator

Floating-point operations
Log scale

- Industry
- Academia
- Research consortium

G LaMDA 10^{25}

GPT-3   AlexaTM

Stable Diffusion
Transformer 10^{20}

10^{15}

10^{10}

10^{5}

Theseus   1

1950 60 70 80 90 2000 10 20
Year

Sources: "Compute trends across three eras of machine learning", by Sevilla et al., 2022; Our World in Data
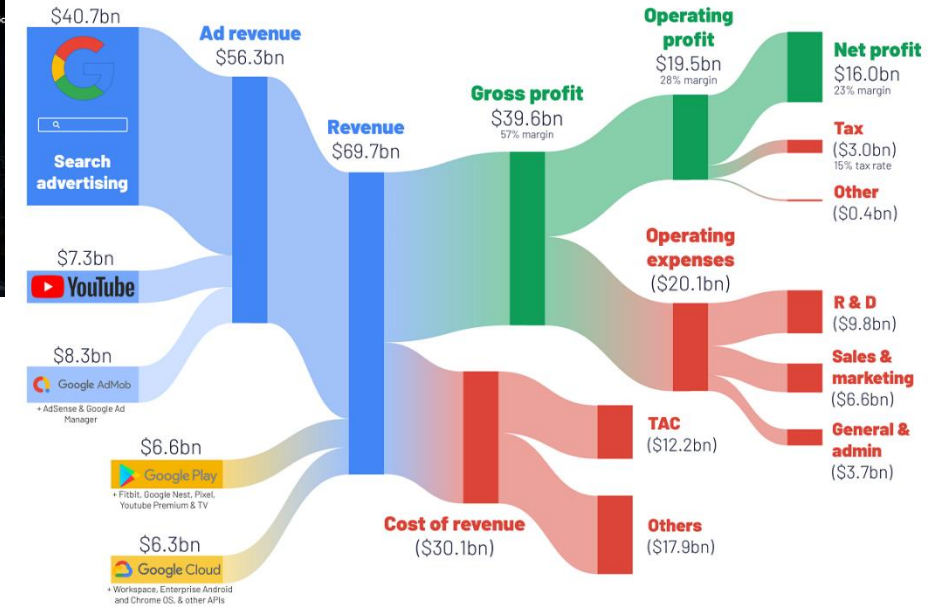
The Economist

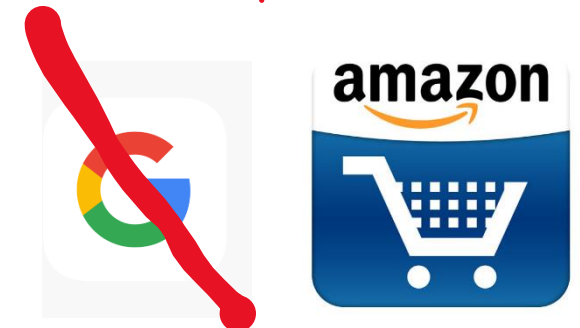RadrLab

Business –
Google vs Microsoft

- The Future of Search is Conversational
  - Asking your doctor for advice
    - Google – you receive a list of links to articles to read
    - ChatGPT well-written note

- Open AI
  - Open AI capped profit entity 100x investment
  - Then reverting to non profit
  - Aim to create open general intelligence

- Microsoft - ChatGPT and Bing
  - 3 pct of search vs 90pct Google 120b usd revenue 9mo 2022
  - Mfst investment in Open AI 13b usd, 15pct of 85b profit 2022
  - Every pct gained in search market share is worth 2bn usd (Guardian)
    - Feb-march Google decline 1 pct - SimilarWeb

- New technologies disrupt their traditional markets
  - Innovators Dilemma 1997 Clayton Christensen

- Google - Code Red
  - 81pct of Alphabet revenue is advertising, mostly pay-per-click ads
  - "Google will recalibrate the level of risk it will take when releasing new public facing AI tools" Sandar
  - Market Cap 2trillion in nov 2021, now 1.2trillion
  - From page ranking to language models answering the question

Source: Alphabet June 2022 quarterly results

100b cloud spending, 500b digital advertising, 5.4trillion e-commerce distruption, IDC / Group M

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Alphabet June-2022 Quarterly Income Statement

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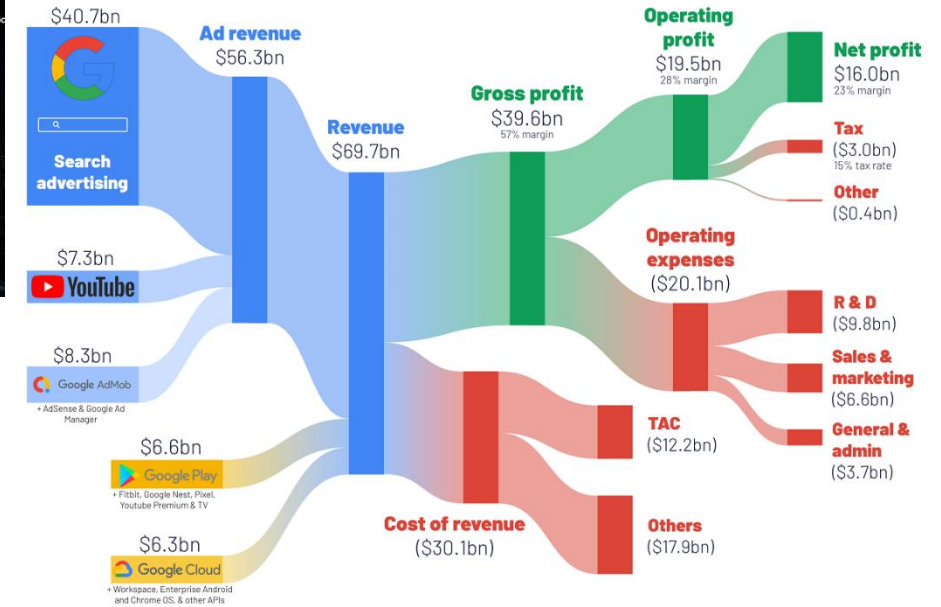5.4trillion e-commerce distruption, IDC / Group M

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AI anvendelses temaer
De første år …

- Automation
  - 73 pct / Qampo
  - Bots writing emails to bots
- Kuratering
  - McKinsey
- Beslutningsstøtte, det grove arbejde
  - DDB / Visiopharm / Ukraine aflytning
  - Skrive tekster, programmere 65 pct
- Orkestrering
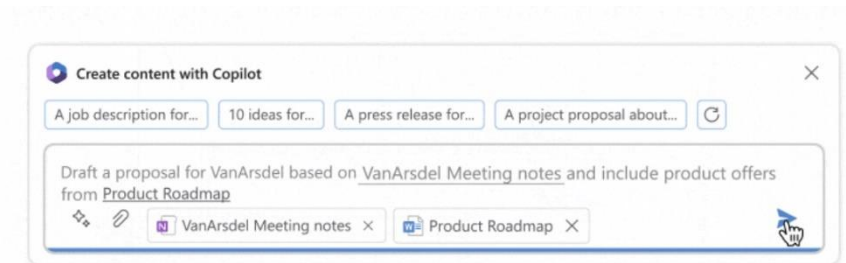 - Byggesager / Disaster management

Eksempel
A-K-B-O AI løsning

- IBM iX og Industriens Pension
  - 400.000 medlemmer og 8000 virksomheder
  - 267.000 årlige telefonopkald, ca 700 om dagen

- Pain points
  - Kundecenter rådgivningsmateriale 500 sider tekst
  - Ofte 5-7 klik og lang ventetid på informationssøgning mens kunden venter i telefonen

- Talegenkendelse og AI lytter med på kundesamtaler i realtid
  - hjælper medarbejder på tværs af de 500 sider

- 3 AI modeller der spiller sammen
  - en transkriberer samtalen til tekst
  - nr 2 kategoriserer og finder relevant info
    - nr 3 finder dybere materiale

- Resultatet er at information typisk er 1 klik væk, søgninger er elimineret

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ChatGPT BingChat & API'er / apps

- DoNotPay – the worlds first robot lawyer
  - Negotiate to settle bills like medical bils, landlord-tenant disputes
- Carbon Health, making a health improving plan with excercise suggestions and lists of meals
- Jasper.ai, writing high caliber entertaining material, used in marketing, newsletters
- Auto Bot Builder, create chatbots for business needs
- Poly AI, conversational platform, creating voice assistants for business
- Search everything you heard or said with AI - Rewind.AI
  - Search through zoom meetings, emails, whatsapp conversations Medium
- Character AI – create chatbots that can imitate the conversational style of anybody – Joe Biden
- Quillbot
  - Takes a section of your writing and rewrites it in a more friendly, professional, casual, or another such tone of voice.
    - Formal, simple, creative Expand: Adds more detail and depth to increase sentence length.
    - Shorten: Strips away extra words to provide a clear message.

DoNotPay
The world's first robot lawyer

Create content with Copilot

A job description for... | 10 ideas for... | A press release for... | A project proposal about...

Draft a proposal for VanArsdel based on VanArsdel Meeting notes and include product offers from Product Roadmap

VanArsdel Meeting notes | Product Roadmap

Elon Musk | Tony Stark | Plato | Alan Turing

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29 juni 2007

- iPhone
- App store 2008

Open AI
The app store moment...

- An emerging computing platform shift, with generative AI being the new computing platform
  - Ben Bajarin – Creative Strategies Fastcompany

- Launch of ChtGPT plug-ins looks like the launch of iPhone app store in 2008
  - Users will be able to choose from 100s of plug-ins
- Developers will be able to chain plug-ins with others
  - ChatGPT user could chain diet app (for a healthy recipe idea)
  - to a mathematical plug in to calculate how much to buy,
  - to Instacarts plug in to order the ingredients
    - Fastcompany

- If we had something on the phone that knows all about us
  - our belongings, our property, our friends, entertainment habits
  - Talking to us in a natural way so we can interact with it, would we need our apps anymore ?
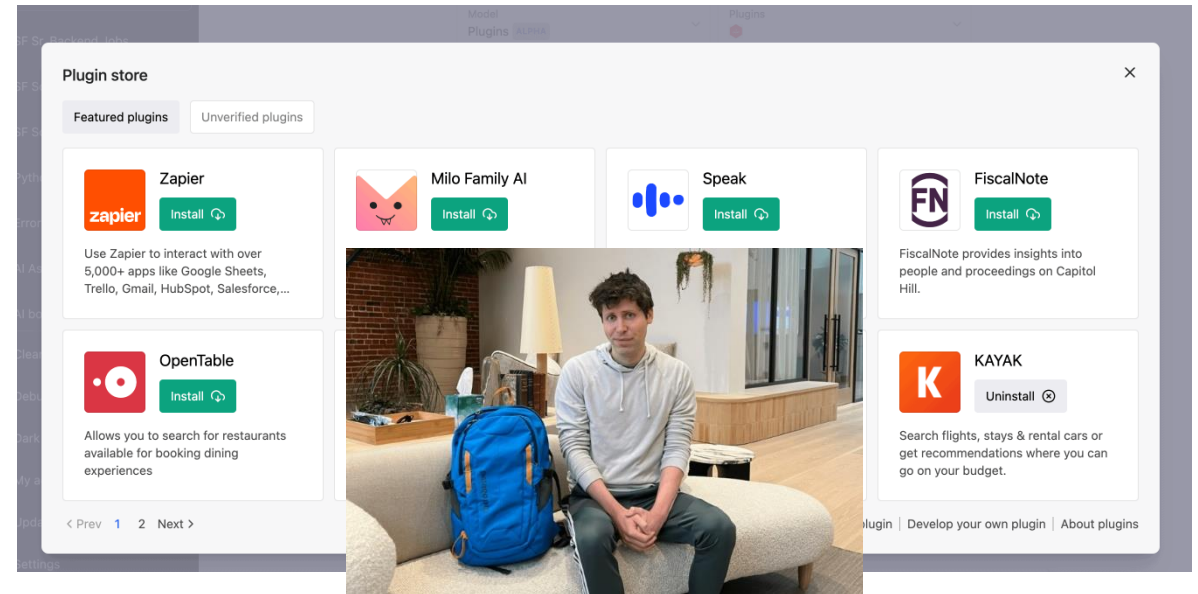   - Fastcompany Perplexity Srinivas

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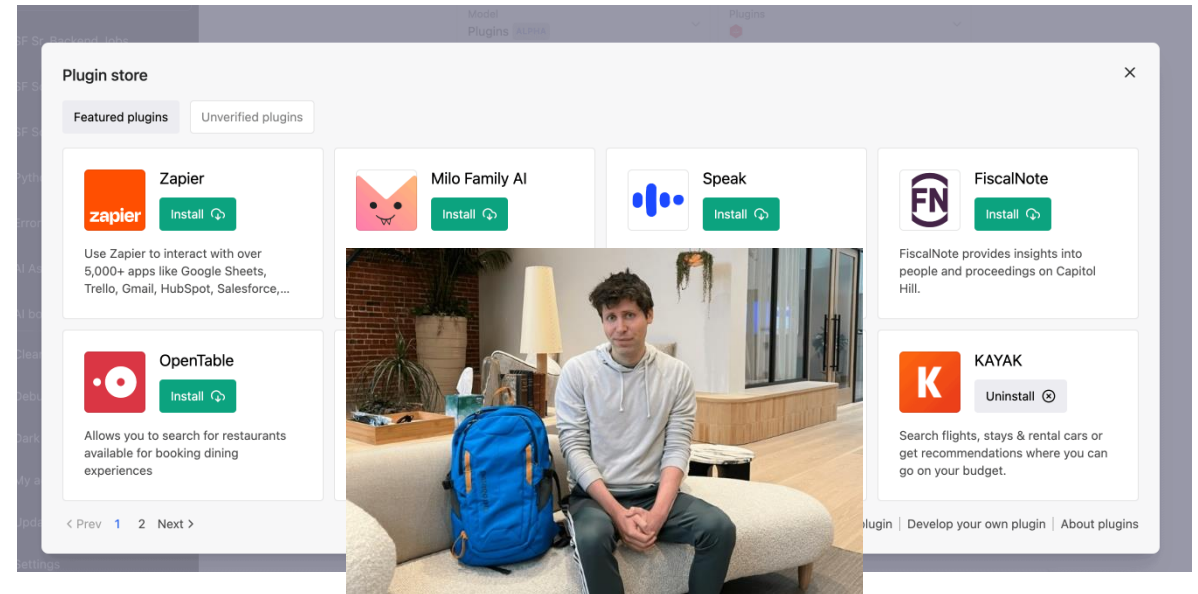
Open AI
The app store moment...

- Retrieve real-time information – sports scores, stock prices

- Retrieve knowledge-base information – company docs, personal information
  - Perform actions on behalf of user

- Expedia plug in
  - Book a flight for you, Open Table, Instacart

- Browsing plugin
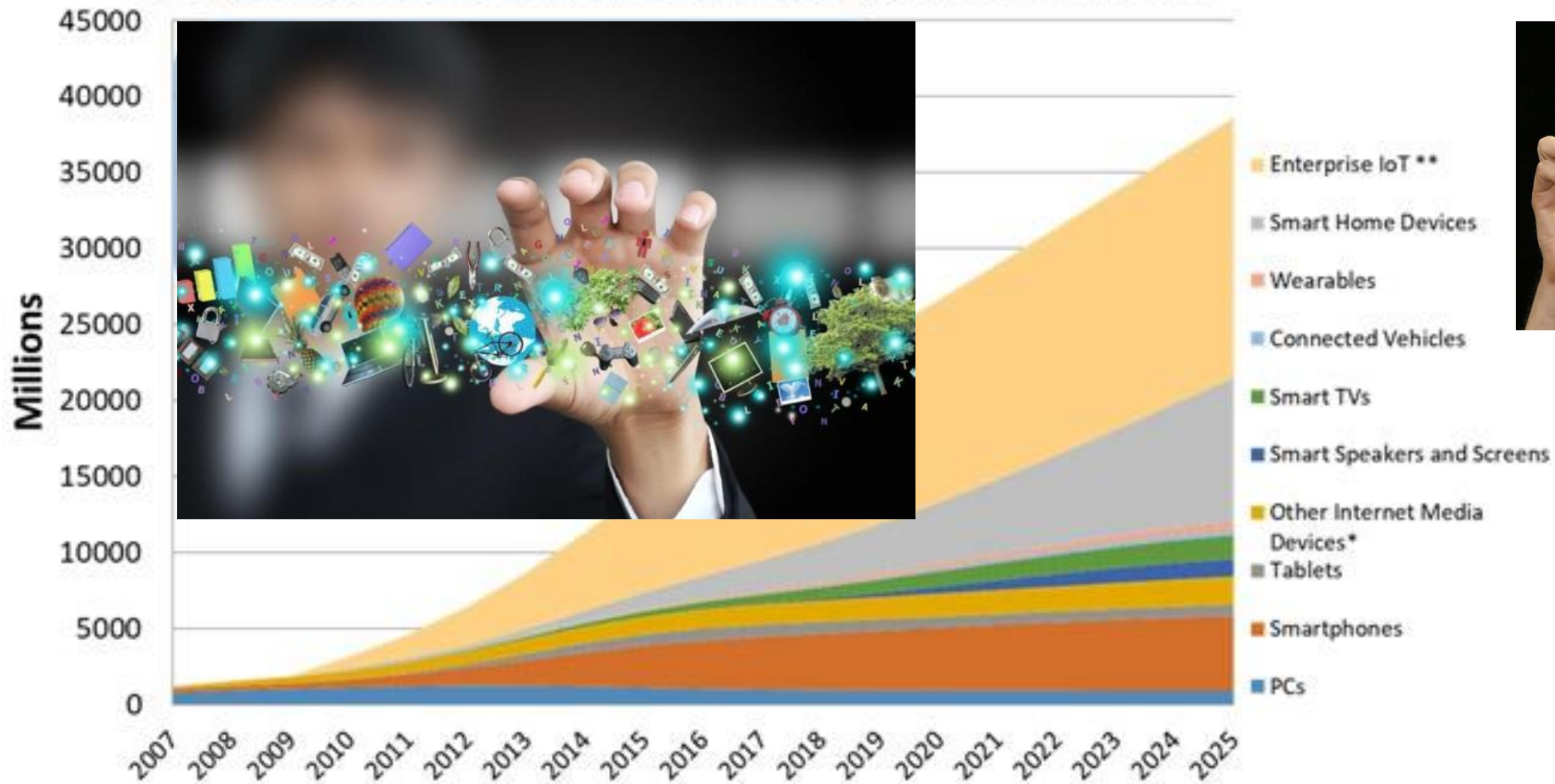 - Access and read information from the internet
   - Medium Ignacio de Gregorio

Labor Market Impact

- AI could automate 25% of the entire labor market
- 46% of tasks in administrative jobs
- 44% of legal jobs
- (6%), installation and repair (4%), and maintenance (1%).
  - Goldman Sachs 26 march
  - Prompter

Occupations with no labeled exposed tasks

- Agricultural Equipment Operators
- Athletes and Sports Competitors
- Automotive Glass Installers and Repairers
- Bus and Truck Mechanics and Diesel Engine Specialists
- Cement Masons and Concrete Finishers
- Cooks, Short Order
- Cutters and Trimmers, Hand
- Derrick Operators, Oil and Gas
- Dining Room and Cafeteria Attendants and Bartender Helpers
- Dishwashers
- Dredge Operators

Mathematicians
Financial Quantitative Analysts
Writers and Authors
Web and Digital Interface Designers
Accountants and Auditors
News Analysts, Reporters, and Journalists
Legal Secretaries and Administrative Assistants
Climate Change Policy Analysts
Correspondence Clerks
Blockchain Engineers,
Court Reporters
Proofreaders and Copy Markers.

Internet of Things

Global Connected and IoT Device Installed Base Forecast

Millions (y-axis): 0, 5000, 10000, 15000, 20000, 25000, 30000, 35000, 40000, 45000

Years (x-axis): 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025

Legend:
- Enterprise IoT **
- Smart Home Devices
- Wearables
- Connected Vehicles
- Smart TVs
- Smart Speakers and Screens
- Other Internet Media Devices*
- Tablets
- Smartphones
- PCs

Source – Strategy Analytics research services, May 2019: IoT Strategies, Connected Home Devices, Connected Computing Devices, Wireless Smartphone Strategies, Wearable Device Ecosystem, Smart Home Strategies
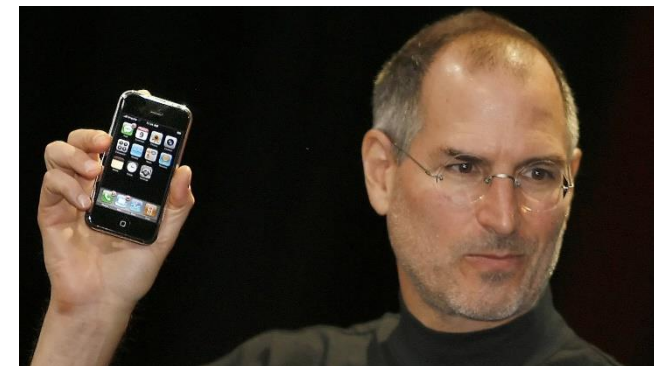
Battery Free IoT

- Wiliot – energy harvesting
  - Bluetooth Low Energy
    - Samsung, Qualcom og Amazon Web Services
- Vægt, tryk, temperatur.
  - Hvornår en genstand er blevet løftet
  - Pilleglas eller en mælkekarton næsten tom
  - Kan integreres i tøj, og kommunikere med vaskemaskinen
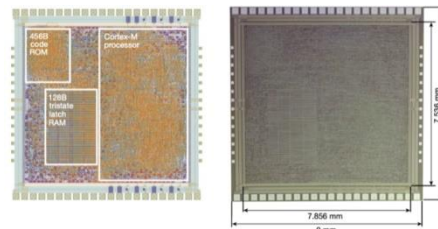
Plastic chips, eller chipløs IT

- En knap til volume på musik i stuen
- En sensor der automatisk bestiller havregryn eller vaskepulver når pakken er tom
- En vandsensor der registrerer et sprunget vandrør
- WiFi backscattering, sensor reflekterer radiobølger, som en nødstedt bruger et spejl med solens stråler til at signalere
- En mekanisk bevægelse og mængden af refleksioner fra et tandhjul med kobber og grafen reflekterer radiobølgerne
- 0 og 1 er tand eller ingen tand
- University of Washington

AI & IoT Sensors

- Rat facial recognition
  - Where do they come from, who is returning, who is making the damage
  - Rentokil
  - Guardian
- Dent detector
  - Sensor real time detect dents, scratches and smoking and relay information to ride sharing company in real time
    - Accelerator sensors and AI trained algorithms identify potential damage in 9 zones and classify from cosmetic to severe Robert Bosch WSJ
- IoT AI Proxemetics
  - How people use space around them to mediate social interactions
    - Google Soli - Detect body orientation, which direction are you facing
    - Computer senses you are nearing, and boot up screen
    - TV turns off, bookmarking Netflix when leaving couch Google Advanced tech and Products Division

Fysiske robotter
- nu med AI

- Fra simple til nu robotter med AI
  - Fabriksrobotter der lærer via video
- Rolls Royce 1.5 cm (5/5) kakerlak robotter
- Parkeringsrobotter
- Hadrian (1000 mursten i timen)

ROLLS
R R
ROYCE

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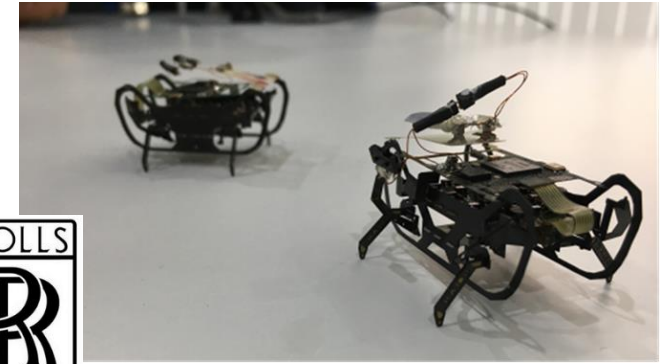
Robots at home
Tesla Optimus

- Tesla Optimus, vision is mow lawns, clean dishes, use drill and screwdriver, push objects

- Moley kitchen, 5000 recipes, 200k usd

- A level of animal intelligence with agility fused with sensory modalities
  - A cat is never going to learn language

- A robot wash dishes, pick up clothes and fold them, cook
  - But it does not write music or fly an airplane

- Google Deepmind, Raia Hadsell
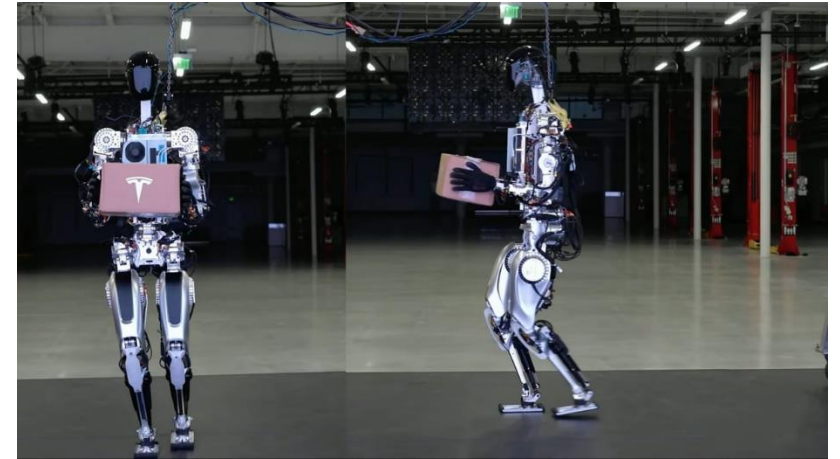
Robotter – Droner

- 500.000 droneflyvninger i 2022 - 1.5 mio 2023
- 400.000 droner i Europa i 2035
- Anvendelsesområder
  - Hjertestarter projekt aalborg – til konkret gps punkt 7 min
  - Blodprøver ærø 200 mio besparelse på landsplan
  - Infrastructure 35% - overvågning, inspektion
  - Agriculture 25% - mapping og styring af sprøjtning
  - Transp 10%
    - 13 pct af alle pakker i tyskland er drone egnede
    - Tyndt befolkede områder, kombiløsninger UPS bil
  - Security 8%
- Passagerer
  - Første kinesisk – nu Jetson – svensk – 80.000 Euro, 32 km rækkevidde

Exhibit

Drones could become cost competitive with other transport modes.

Example breakdown: unit delivery costs and emissions for a five-mile delivery of a 216-cubic inch package (six inches per side)

Energy costs | Labor costs | Other costs[1]

	Drone		Electric car		Electric van		ICE van	
Energy		$0.06		$0.45	~$11.00	$0.65	$2.50	$0.27
	~$13.50	~$1.80	~$9.40	~$1.60		~$1.80	~$11.60	~$1.90
		$0.06		$0.05		$0.07		
	1 package 1 drone per observer	1 package 20 drones per observer	1 package 1 driver	5 packages 1 driver	1 package 1 driver	100 packages 1 driver	1 package 1 driver	100 packages 1 driver

Emissions,[2] kg CO$_2$e								
1.07	1.07	1.40	0.14	2.08	0.20	6.4	0.64

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Fysiske robotter - AI

- Høflighed og finfølelse
  - Chess robot grabs and breaks 7 year old boys finger during match – Moscow
- Firefighting robot Octavia
  - Forstår fagter og mimik
- Tool skilled robot
  - Reagerer på tale, forudser næste behov
  - Lærer også ejerskab og høflighed Yale Universit
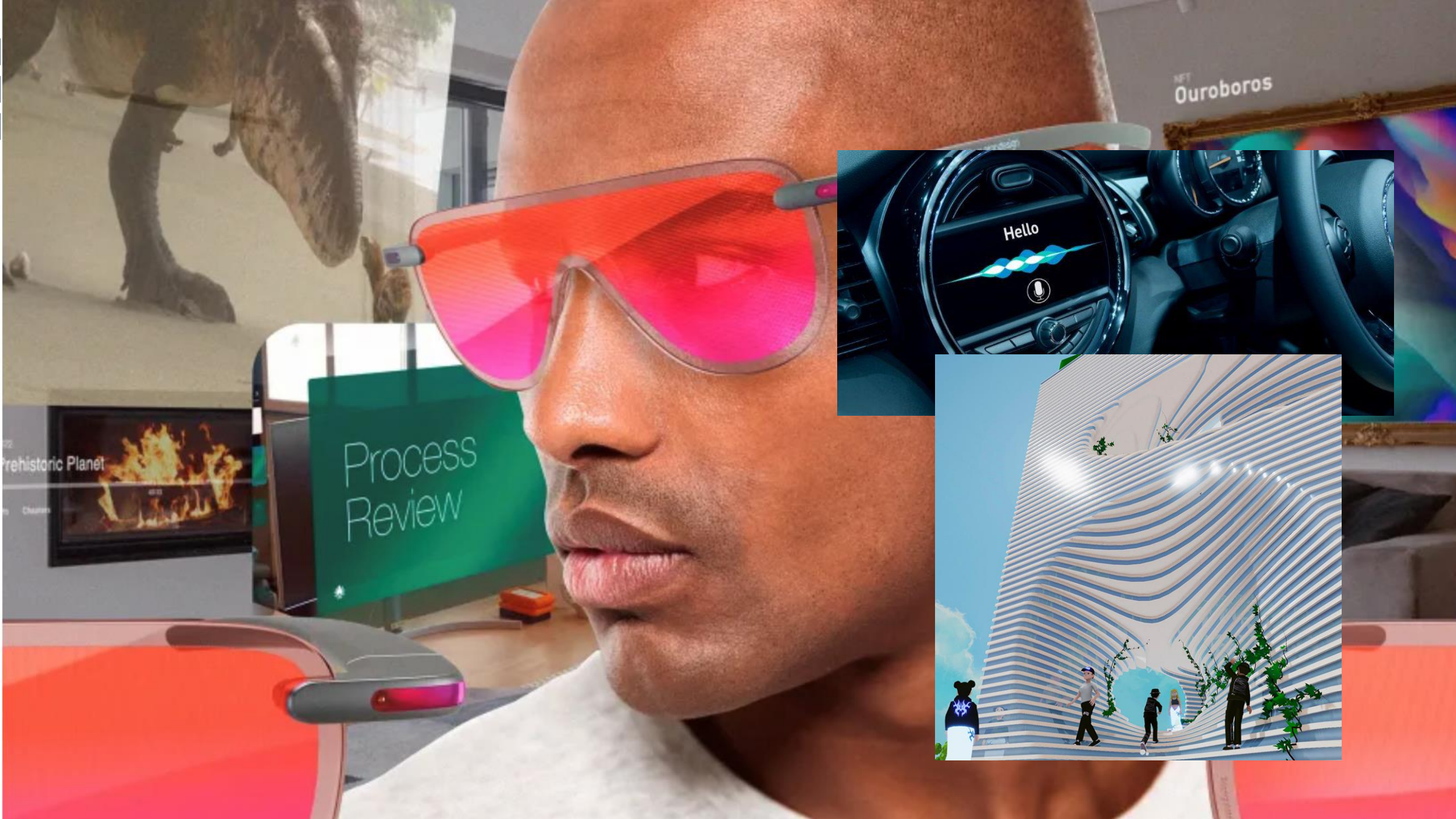
Ambient AI

- Fra "tabs, pads and boards" – Mark Weiser
- Til Ambient AI
  - Everywhere around you
  - The environment is the computer
- A rich sea of devices.
  - The concept of the device is fading away
    – Sundar Pichai, Google CEO
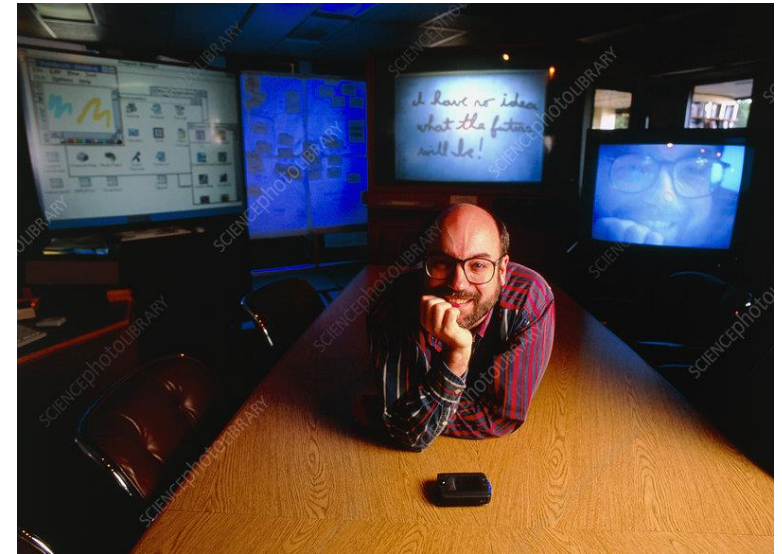
Voice

- Voice

- Action Focused
  - To help people get things done
  - Affective Computing
    - Arising from – or influencing emotion
  - Skændes med din bil – eller køleskab

AR glasses 2025

- From 2025 AR glasses will reach higher penetration
- Lumus Forbes
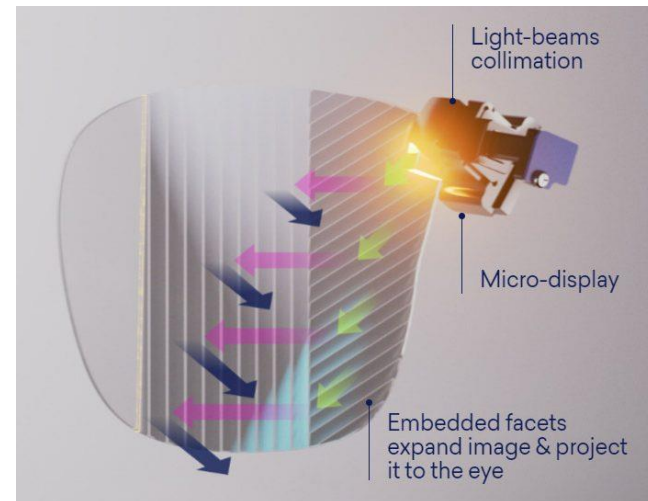
Augmented, Diminished Amplified Reality

- Augmented
  - Medical superpowers – X Ray Vision
    - Peer into a patient, capturing whole body CT scans
    - Providing surgeons with navigational cues projected in real time
  - Information on any place or thing in your field of view, accept with a nod, and it fades away
    - Meeting people, names, also spouse and kids pop up
    - Glance at light switch and give a quick gesture, light turns on

- Diminished Reality
  - To virtually mask, reduce or suppress features of one's environment
    - Removing all advertising from billboards, remove building
      2022 Tech Trends Report – Future Today Institute

- Amplified Reality
  - Compensating for reduced functionality

From Commands to Conversation People Literate Technology

- Paradigm will change from one of technology-literate people to one of people-literate technology.

- People Centric
  - Apps will be replaced by flow
  - Multiperson meeting, sensors and cameras track participants
  - AI recognize people, name tag them, live transcription service
  - Meeting data act like a news feed
  - Refer to a document, and it becomes part of the feed of the meeting
  - Drag video into stream and it is transcribed

- Paul Thurott, ZD Net, The Verge

- BYOE - Human Enhancement

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Digital Twins

- 1982 NASA uses early iteration of digital twin to simulate rescue scenarios for Apollo 13

- GE elevator log, service and upgrade history

- Web3 Digital Twins
  - BMW build digital twins of 31 factories
    - Training robots, experiment with new line layouts and training pushing sw updates, assign robot tasks and tele operate machines
    - Has reduced production planning time with 30 pct already Venturebeat

- Half of large industrial companies use digital twins 2021
  - Gaining 10 pct improvement in effectiveness Gartner
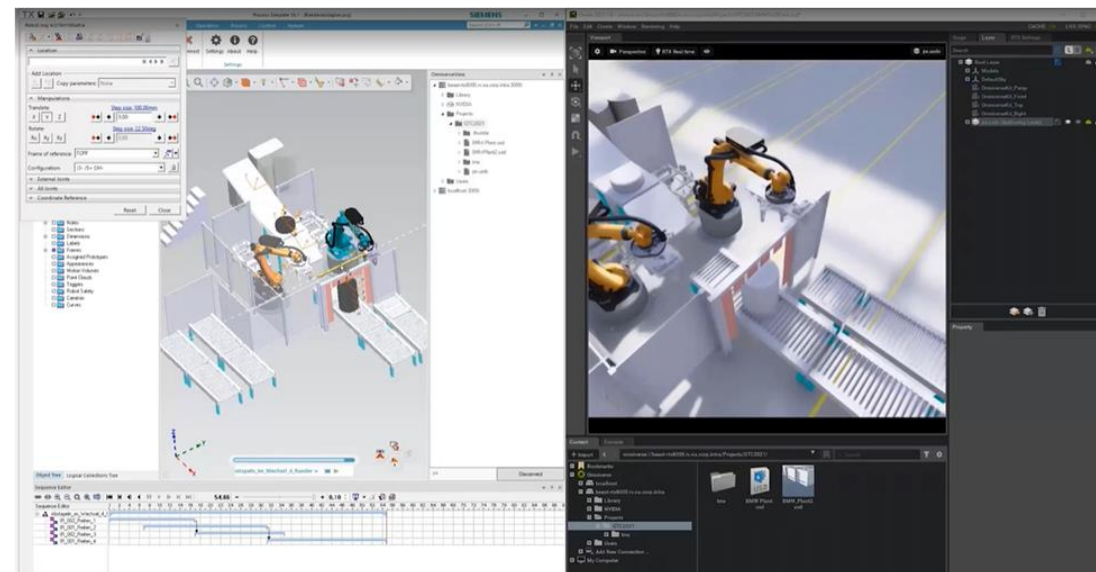
Digital Twins in Supply Chain

- Container & Package Digital twins
  - Solve breakages in the supply chain by anticipating
  - Using AI to figure out a workaround Amazon
- Supply-chain digital twins
  - Renault Google
- Tech Review
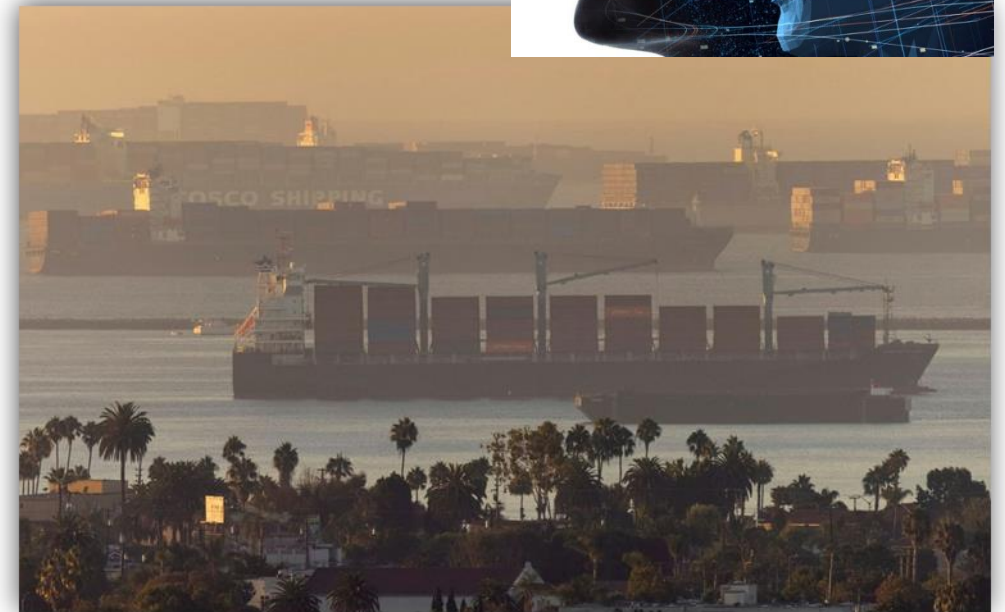
Rotterdam havn, digital tvilling

- The Port of Rotterdam is building a digital twin for the entire harbor
    - Showing location of each ship and container,
    - sharing it with partners
    - estimated savings 80.000 usd per container ship docking
    - leading to autonomous ship loading/unloading at a later stage

- Port of the Future, how technology is transforming shipping Raconteur

    - Buildings, organizations, humans

Data Breach

Cyber Attack

Skurke

Protection Failed

Legal
Pinnochio, big money, EU AI Act

- Pinnochio
  - Large Language model, trained on most of web, but does not keep track of sources, and may even invent answer
  - Does not separate fact from fiction
  - "These systems are not designed for truth. They are designed for plausible conversation" – Noam Shazeer, co-founder of Character.AI – New York Times
  - Bing AI search for show times for Avatar 2 did get the year wrong (2022), and began to take an aggressive stance
    - "I'm trying to be helpful, but you are not listening to me" CNET
    - 72pct of people reading AI composed news believed story, though it was false Univ of Washington / WSJ

- Open AI and Shutterstock
  - Generative toolkit, creating images ready for licensing
  - Building the image, paying photographers who is supplying the base - TC Ingrid Lunden
  - Stability AI and Midjourney lawsuit, 3 artists claim Stable diffusion scraped the internet for billions of works without permission to use this to produce"derivative works"Venture Beat

- EU AI act
  - Requirements and extra checks
  - for use of AI in high risk use cases, affecting a persons health, basic freedom, financial wellbeing, recruitment, helping judges make decisions
  - Software must maintain an audit trail
  - EU liability laws for AI products that cause injuries
  - Also to notify when user encounter deepfakes, or systems that can read their emotions
  - Software and Data loss is a potential harm, and you can seek liability damages Fortune & Tech Review

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We are a little bit scared

- I am particularly worried that these models could be used for large-scale disinformation
  - Sam Altman OpenAI CEO
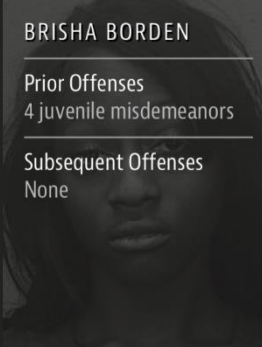 - Guardian

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AI Bias – Compas

- Correctional offender management profiling for alternative sanctions
- Compas
  - Look at criminal personality, social isolation, substance abuse, residence/stability, ranked low, medium, high in each category
  - New York Study, 71 pct accurate, but no evaluation of racial bias

- 18 år, "cykeltyveri"
- 41 år butikstyveri

- Broward County Florida, 7000 arresterede 2013-14 analyse
- Labeled higher risk, dit not reoffend
  - White 23 pct, african american 44.9 pct
- Labeled lower risk, but did offend   Rekrutterings AI
  - White 47 pct, african american 28 pct Pro Publica

Det gør ikke ondt at tage onde beslutninger
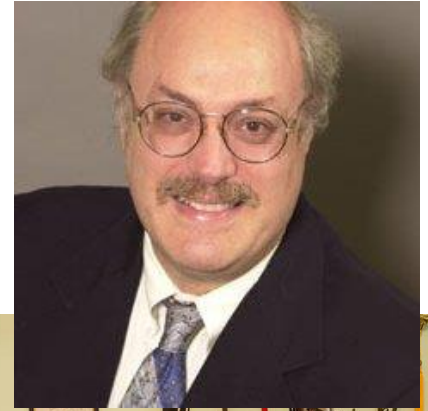
- Tammy Dobbs, cerebral palsy, moving from Missouri to Arkansas
  - 56 hrs of help to 32 hrs. Algorithm
  - State approved, out of 196 people complaining only 9 won

- Creator of the algorithm for healthcare benefits Brant Fries, InterRai
  - implemented in half of US states
  - "To explain how algorithm works is someone else's responsibility"
- LAPD database of gang members include 42 babies under
  - Researchers answer was "I am just en engineer"

- Medium.com – Rachel Thomas AI researcher

IoT
Cyber Security

- June ovens
  - Turn on at night – Preheat to 200 C
  - NY fire dept, unattended cooking accts for 33 pct of home fires The Verge

- Smart coffee
  - Turn on burner, dispense water, display ransom bitcoin message Arstechnica

- Water irrigation
  - Most popular smart irrigation systems
  - Botnet, attackers can turn on and off at will
  - Botnet of 1355 can empty urban water tower in an hour University of Negev

- Hacket bilvask angriber mennesker
Whitescope Security

Nye muligheder

- Hackers can use lasers to speak to Amazon Echo or Google Home
  - Laser powered light commands can unlock cars, open garage ports and more
  - Can pass through a window and range of up to 75m
  - Microphones respond to light like it was sound when intensity of light is changed at a precise frequency University of Michigan
- Great Seal Bug
  - A line of sight to any reflective objects in a given room
  - Optical sensor and telescope – real time snooping even on lower volume conversations
  - Sound waves change air pressure causing vibrations in objects Ben Gurion University Wired
  - Microsoft demo houseplant leaves or empty potato chip bag
- Israeli researchers can use computers cooling fan or hard drive motor to transmit stolen data as audio

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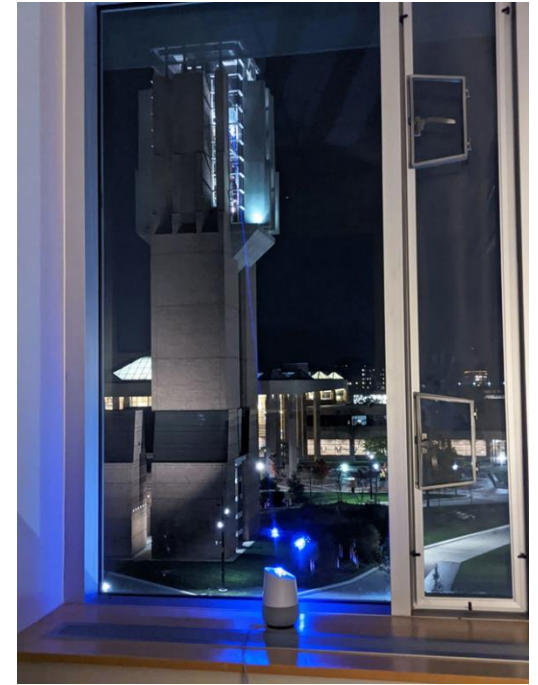
AI Cyber Riscs

- Warning on AI in financial sector as target
  - Protection of AI systems in its infancy
  - Can be fed faulty information – systems to counter disinformation is not in place
  - Tricking overleveraged banks to take massive losses
  - Lending computers flooded with loan applications, tilting their sense of reality WSJ
- AI enabled malware
  - AI enabled malware learn information, may know names of your children and your plans for the weekend
  - May pose as friend or colleague, send family picture and link to click on
- Smarter AI Cybersecurity attacks
  - Coding a AI hackbot that learn from its failure, it will continue learning and becomes almost unstoppable
  - Also hackers will use AI to attack company AI tools while they are still learning, making it possible to use those AI bots against the company, breaching company network
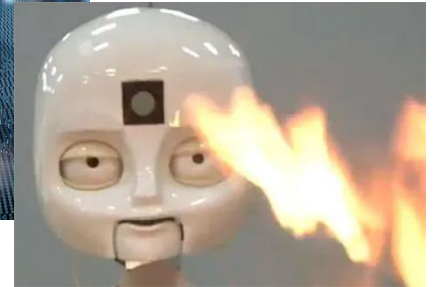
- Jack Wallen ZDNet
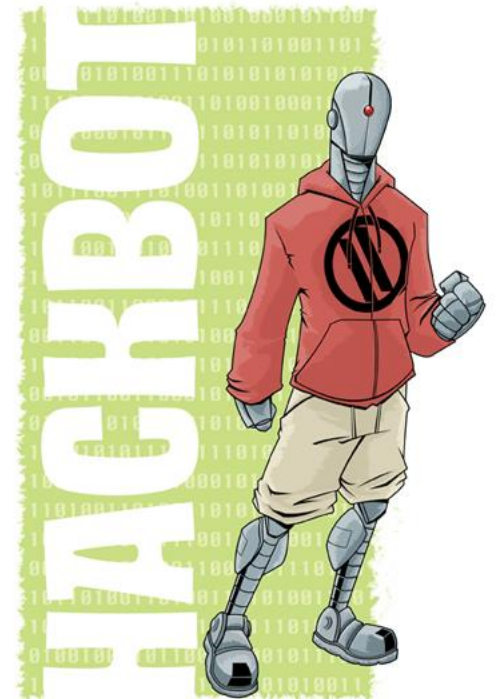
Future of Teams is Hybrid

- Team struktur med digitale assistenter
  - AI expert roles
  - AI takes away routine tasks
- Remaining work is likely to be done in loose adhocracies of groups of people with needed skills MIT Sloan
- From BYOD to BYOE – Bring your own Enhancement Gartner

Driving IT

- Den tredje bølge – den største af dem alle

- AI til hverdag og … Nu med hvaler, og Olsen Banden som Star Wars
  - GDP 4 x dampmaskinen

- Machine Learning – Qampo – bagage, hjemmepleje, HR

- Deep Learning – Neurale netværk – kan programmere sig selv, ansigtsgenkendelse

- Generative AI – to AI'er skaber ting – design

- GPT
  - Generative
  - Pretrained
  - Transformer

- Intel inside – en ny computer platform

- Internet of Things – 80 mia
  - Uden batterier – eller uden chips
  - Med sensorer og AI – buler og rotter
  - Robotter der kan tage ved lære fra video, men mangler høflighed

- Ambient AI
  - Voice – action
  - AR fra 2025 – men kun en gang imellem

- Digitale tvillinger
  - Rotterdam havn, containere, dit hus, din patientjournal

- Cybersecurity
  - Løgnehistorier og manipulation
  - Bias og Det gør ikke ondt at tage onde bestlutnnger
  - IoT ovne, kaffemaskiner og vandingsanlæg
  - AI skurke – kender dig bedre end din familie – umuligt at kende forskel

- Future of Teams Hybrid
  - preben@mejer.com

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