



En smartere verden med kunstig intelligens – fusjon mellom menneske, teknologi og kultur

Harriet Wright, Watson & IoT Business Developer, IBM Norge

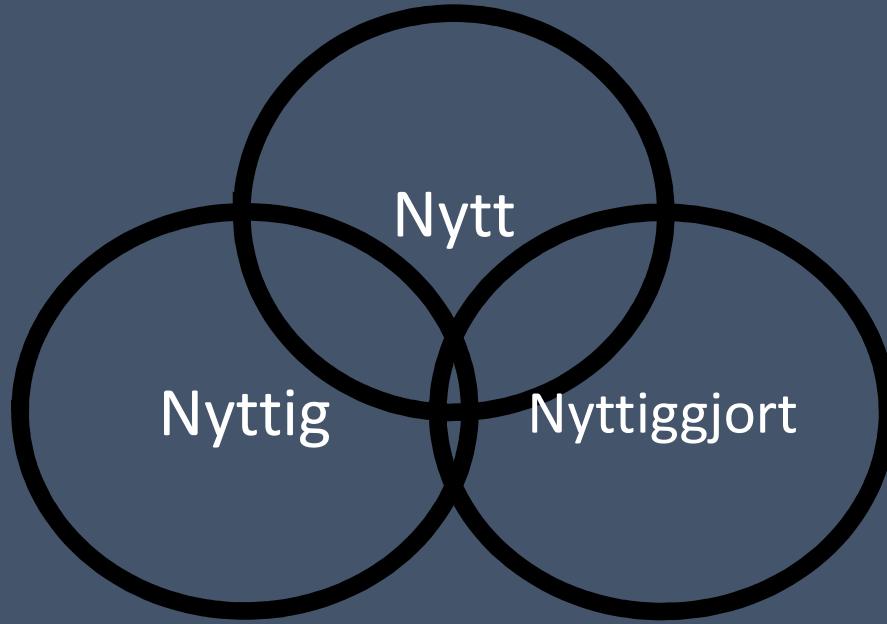
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Innovasjon



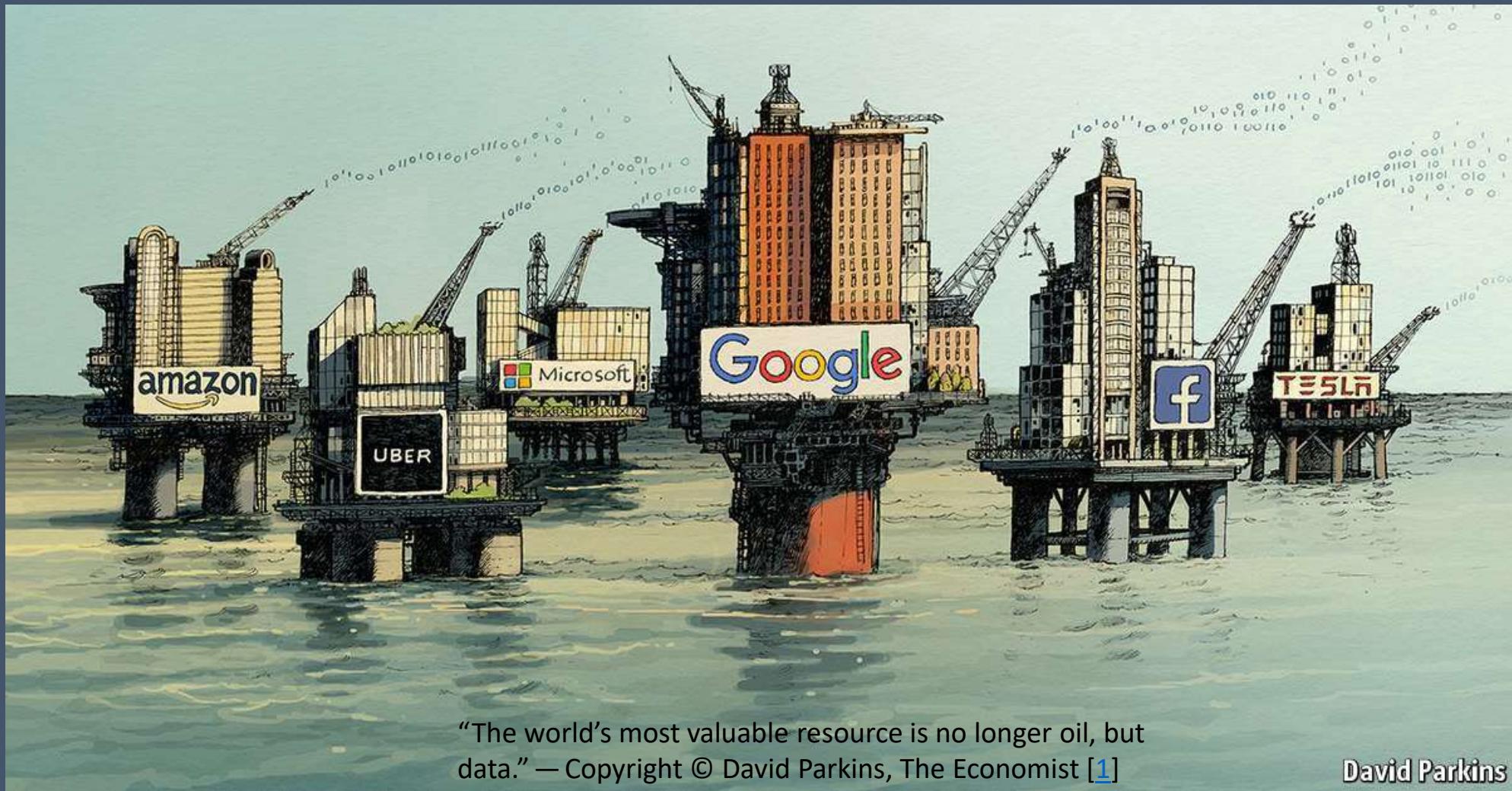
"en ny vare, en ny tjeneste, en ny produksjonsprosess, en
anvendelse eller organisasjonsform som er lansert i
markedet eller tatt i bruk i produksjonen for å skape
økonomiske verdier"

Kjørte med tilhenger festet i bagasjerommet

– Har ikke sett noe lignende, sier politiet.



ANMELDT: Denne bilisten ble stoppet av politiet i Rosenkrantzgata i Drammen fredag.



“The world’s most valuable resource is no longer oil, but data.” — Copyright © David Parkins, The Economist [1]

David Parkins

Data has transformed every industry, profession, and domain

102,000,000

wearables shipped in 2016, growing to 237,000,000 by
2021

100,000

new cancer articles published every year

80,000,000

MRIs taken every year, up from 3,000,000
in 1980

2,200,000,000

locations generating hyperlocal weather forecasts
across the globe every 15 minutes

2,581,586

Emails every second

10,000

new software vulnerabilities recorded in 2016, up
30% since 2011

600,000,000

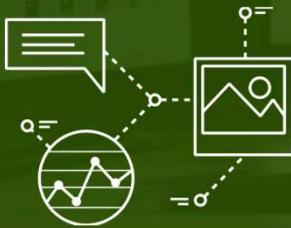
forms of malware - with close to 400k variations
introduced daily

500

hours of video uploaded to YouTube
every minute

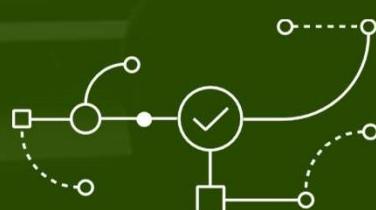
Cognitive systems are different

UNDERSTAND



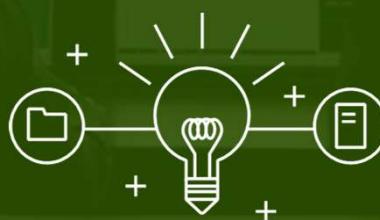
Cognitive systems understand imagery, language and other unstructured data **like** humans do.

REASON



They can reason, grasp underlying concepts, form hypotheses, and **infer and extract ideas**.

LEARN



With each data point, interaction and outcome, they develop and sharpen expertise, so **they never stop learning**.

INTERACT



With abilities to see, talk and hear, cognitive systems interact with humans in a natural way.

Cognitive systems open for a new partnership between humans and machines

Cognitive Systems are better at:

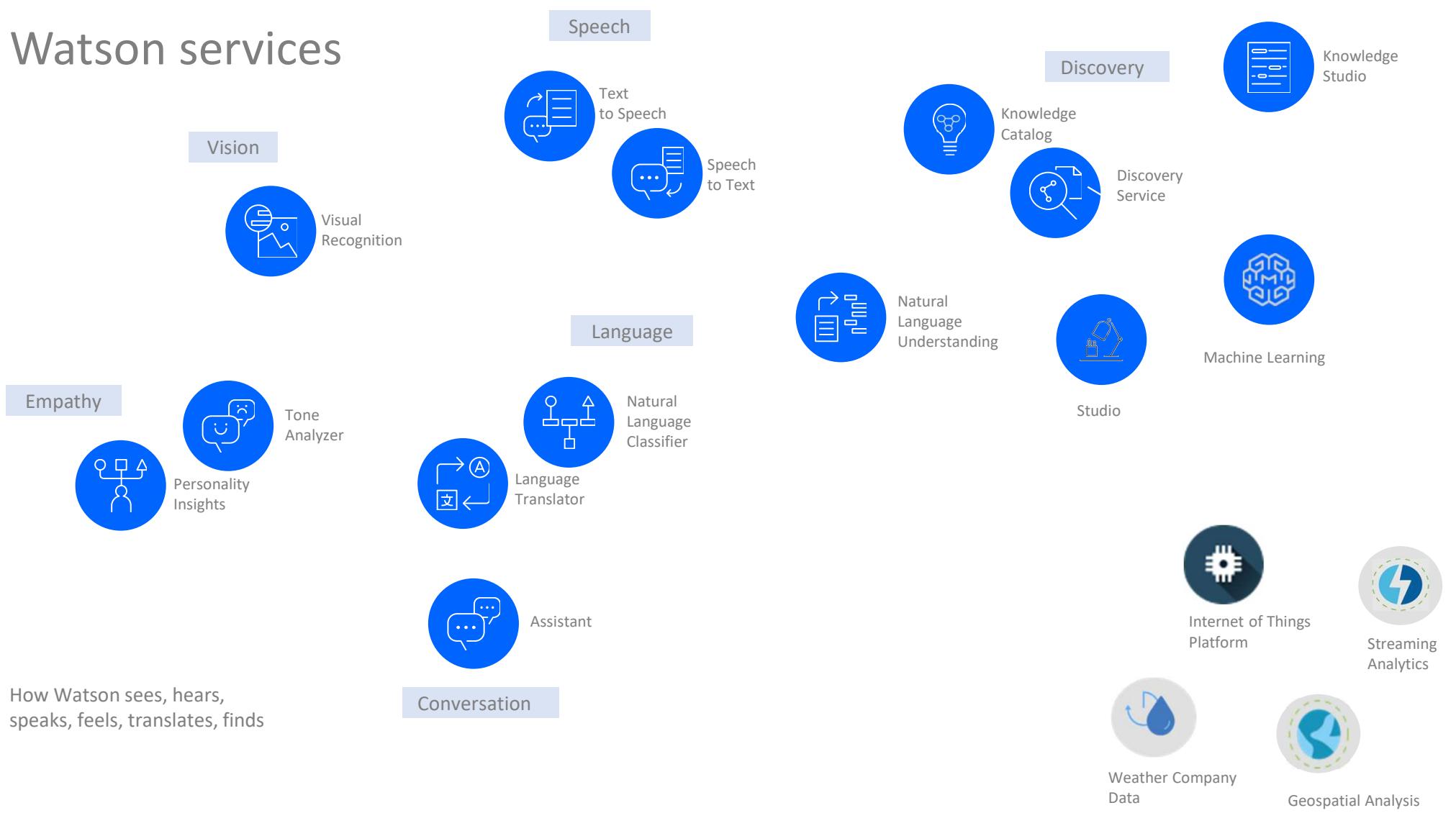
- FINDING KNOWLEDGE
- PATTERN RECOGNITION
- NATURAL LANGUAGE
- MACHINE LEARNING
- ELIMINATE BIAS
- LARGE CAPACITY



Humans are better at:

- COMMON SENSE
- MORAL AND ETHICS
- IMAGINATION
- COMPASSION
- DILEMMA'S
- ABSTRACTION
- DREAM
- GENERALIZING

Watson services





Watson saves a life



Professor Satoru on stage at World of Watson October 2016 telling Ayako Yamashita's history.

Watson as medical assistant



IBM Watson

Watson Corpus

Over 1TB of data

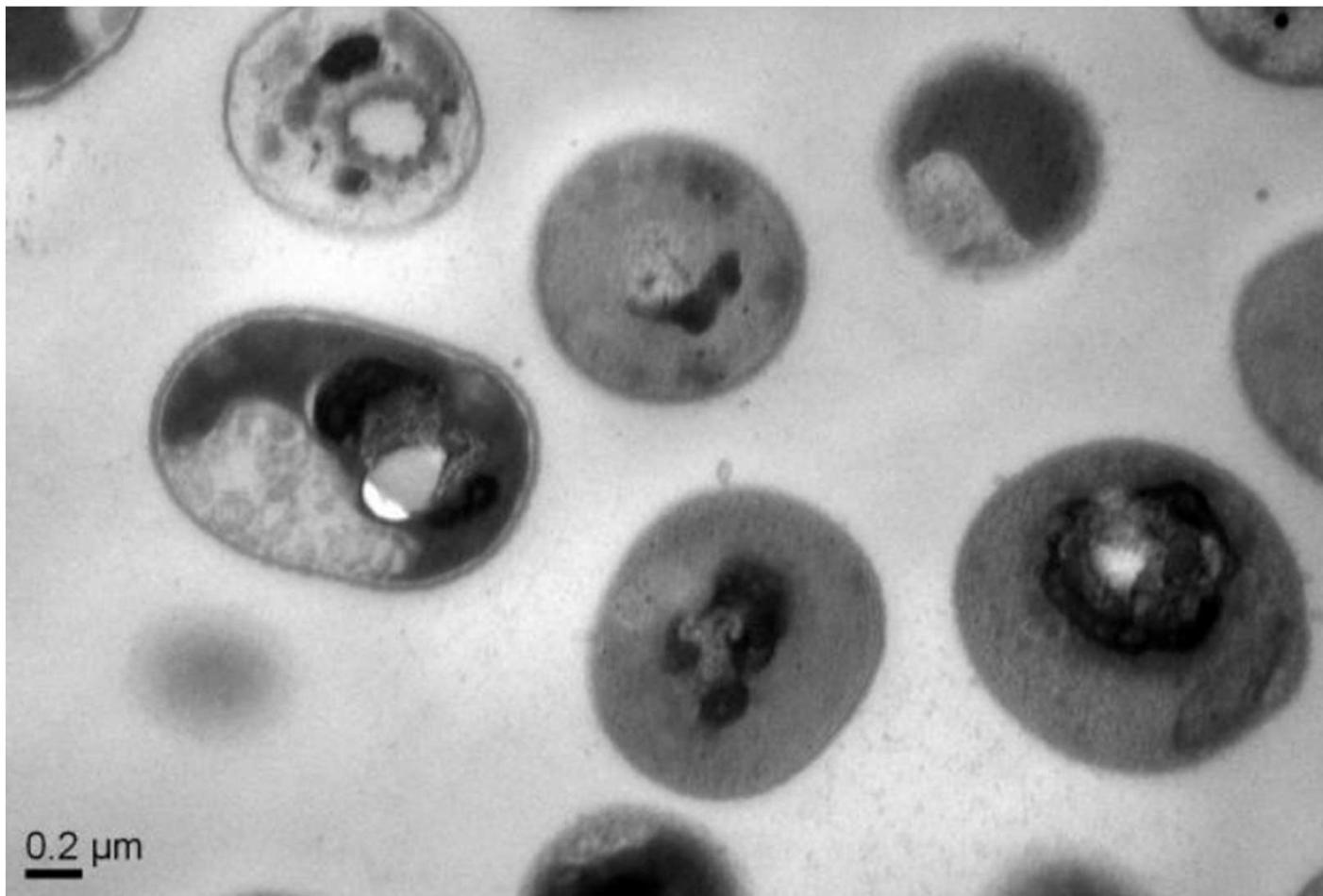
Over 40m documents

Over 100m entities and relationships

Chemical database
Public genomics
Medical textbooks
Medline
Other journals
FDA drugs/labels
Patents

12M+ chemical structures
20,000+ genes
50+ books
23M+ abstracts
100+ journals
11,000+ drugs
16M+ patents

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<https://www.mercurynews.com/2018/03/12/new-molecule-kills-drug-resistant-superbugs/>

En verden med Watson

Kan vi forutse sepsis hos premature barn?

Utvordring

Sepsis er vanlig problem hos premature barn med alvorlige komplikasjoner. Sepsis er vanskelig å oppdage fordi det ofte er diffuse og gradvise tegn.

Løsning

Bruke tilgjengelige kliniske data og avanserte analysemetoder for å identifisere kommende sepsisrisiko. Prosjektet ble gjennomført på 6 uker

Resultat

Modellen kan identifisere sepsisrisiko 24 timer før en lege med høy og klinisk signifikant nøyaktighet basert på tilgjengelig data.

"It's all about saving babies with data and artificial intelligence"

**Markus Leskinen MD PhD, Neonatologist
Children's Hospital**





Boost Mobility
And Improve
Quality of Life

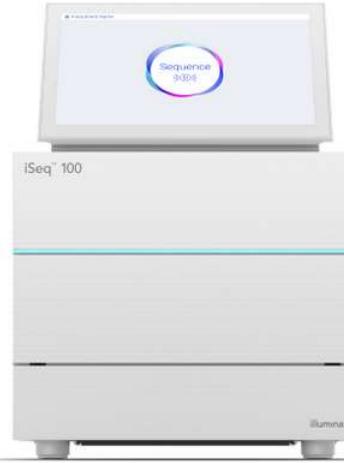


I nær framtid?

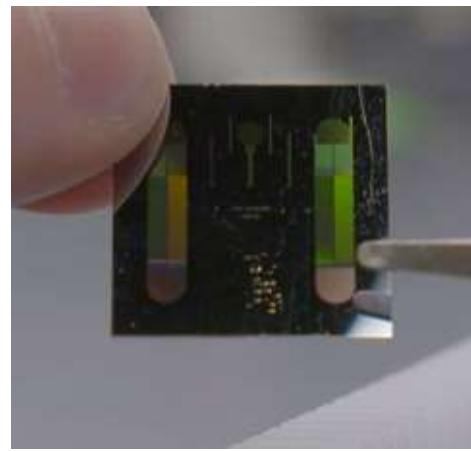


<https://www.research.ibm.com/healthcare-and-life-sciences/>

2:00 AM



Cost



Minimization



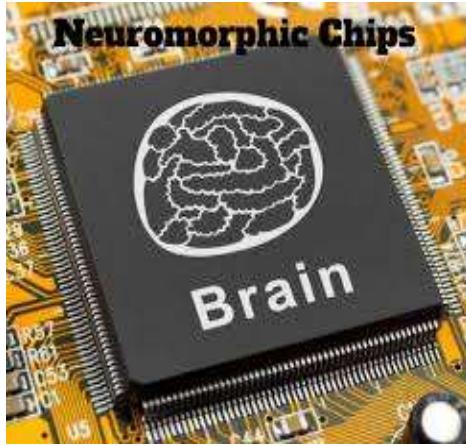
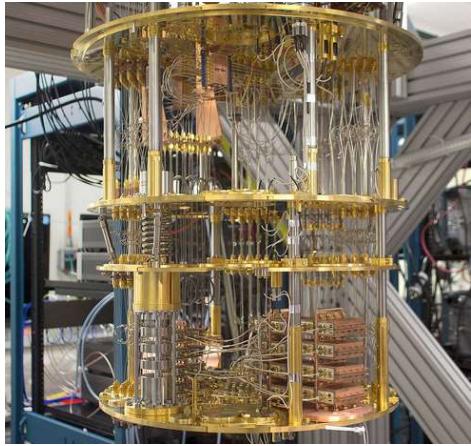
innovation

What's in store

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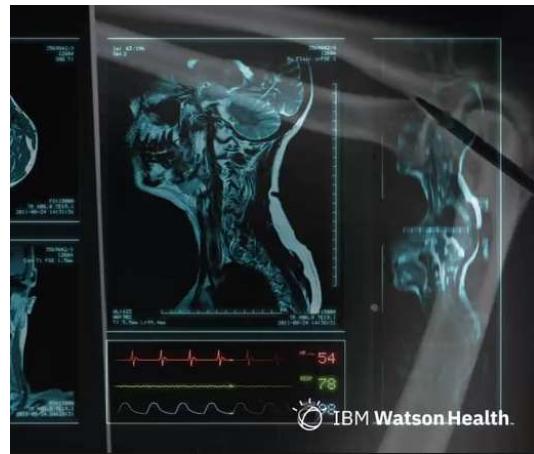
Technology

Wearables/insertables

What's in store



Visualization



Training



AI development

What's in store

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“Coping With Humans”



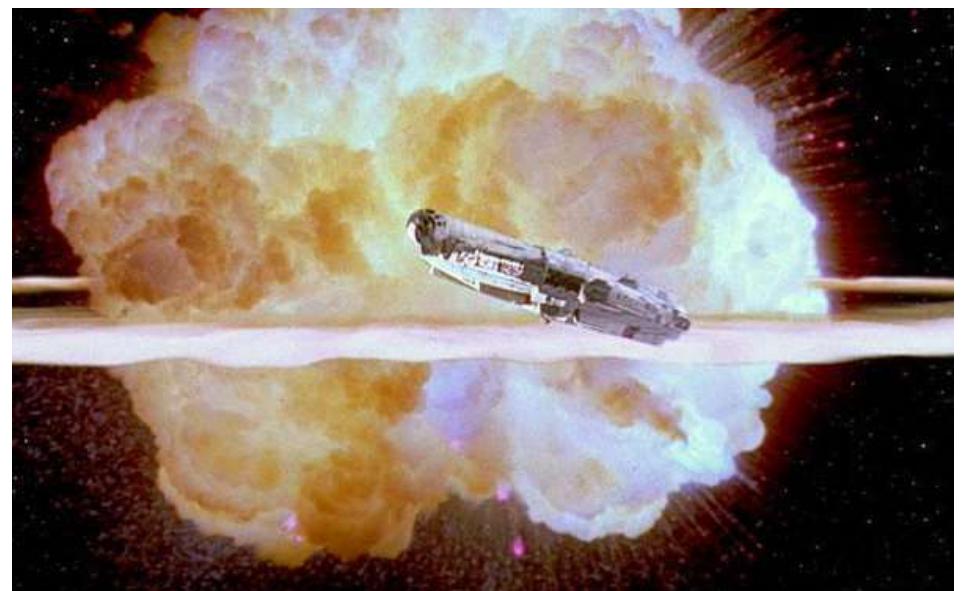




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Luke Skywalker

R2D2

Success!

Takk for oppmerksomheten



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