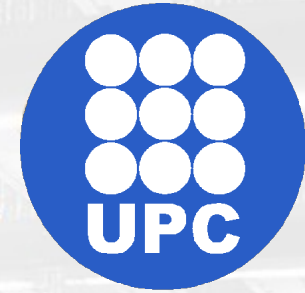




**Barcelona
Supercomputing
Center**
Centro Nacional de Supercomputación



Fintech, AI & ELSEC *Ignorabamus*

Prof. Ulises Cortés

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33è Fòrum de l'Auditoria

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PER AL FUTUR**

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Format híbrid
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de Comptes de Catalunya **EL C0L·L3G1**



What is Artificial Intelligence?

A definition

- **Artificial intelligence (AI)** refers to systems that display *intelligent* behaviour by analysing their environment and taking actions – with some degree of autonomy – to achieve specific goals.
- **AI-based** systems can be purely software-based, acting in the virtual world (*e.g.* voice assistants, image analysis software, search engines, speech and face recognition systems) or **AI can be embedded in hardware devices** (*e.g.* advanced robots, autonomous cars, drones or Internet of Things applications).”


Artificial Intelligence (vox populi)

- Artificial Intelligence has become one of the great, *meaningless* buzzwords of our time.
- The Artificial Intelligence is increasingly used as a political tool capable of shaping public opinions.
- The world of Artificial Intelligence is full of mystery and misconception that spreads faster than reality.
- Artificial Intelligence is transparent, ubiquitous and persistent



AI is transparent, ubiquitous and persistent

If Facebook were a country....



It would be home to 1 in 7 of the world's entire population

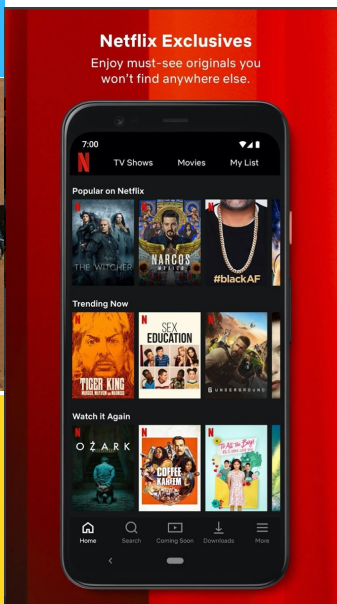
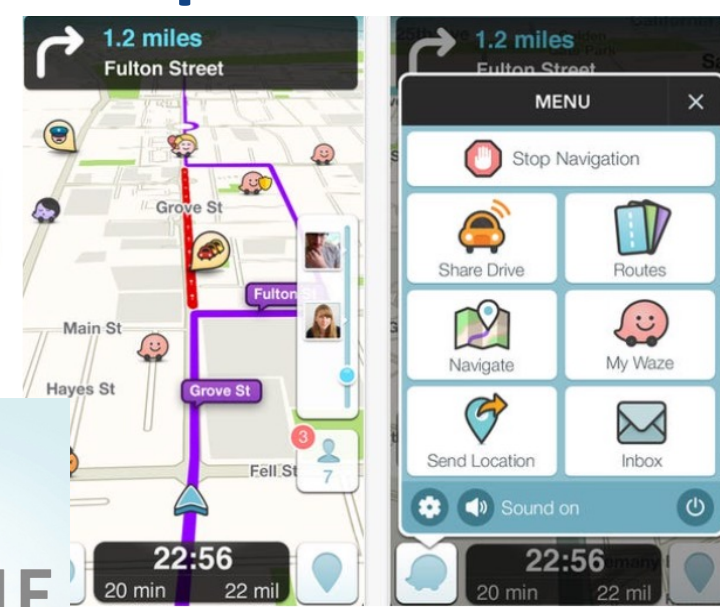
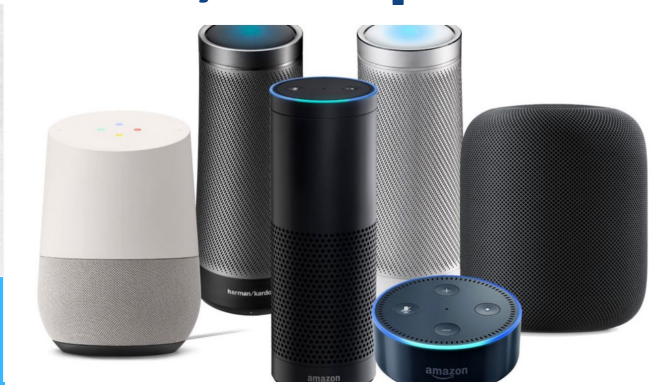


7 Reasons to Not Buy from amazon

Amazon doesn't deserve your money, local green businesses do.

- 1 exploits workers and fights unions.
- 2 is powered by fossil fuels.
- 3 fights tax laws that would support local economies.
- 4 creates excessive packaging waste.
- 5 slashed worker benefits and incentives to save costs.
- 6 facilitates the human rights crisis on the US-Mexico border.
- 7 rakes in billions in taxpayer subsidies but pays \$0 in taxes.

Green America


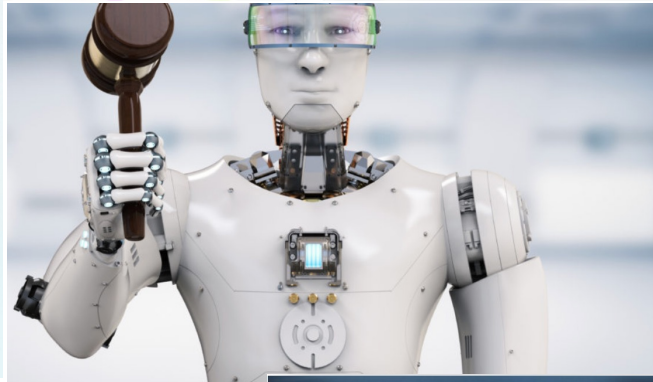


DEEP MEDICINE

HOW ARTIFICIAL INTELLIGENCE CAN MAKE HEALTHCARE HUMAN AGAIN

ERIC TOPOL

With a foreword by ABRAHAM VERGHESE, author of Cutting for Stone

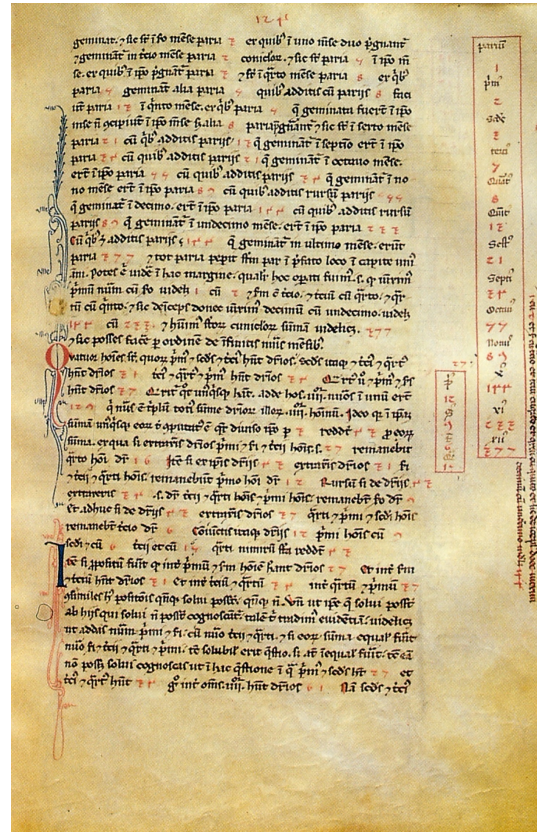
Fintech

- **Financial technology** is used to describe new technology that seeks to improve and automate the delivery and use of financial services.
 - At its core, fintech is utilized to help companies, business owners, and consumers better manage their financial operations, processes, and lives.
 - It is composed of specialized software and algorithms that are used on computers and smartphones.

How old is fintech?



Mesopotamia (3000 BC)
Rate 2%
They paid taxes



Liber Abaci (1202 AC)



AI & Fintech

- **Improved Efficiency and Accuracy:** AI-based systems, in particular, Machine Learning technologies are being used in fintech to automate processes, analyse data more effectively, and make more accurate predictions.
 - This leads to improved efficiency and accuracy in financial services (**less humans in-the-loop**).
- **Enhanced Customer Experience:** AI-based systems enables fintech companies to develop new products and services, such as robo-advisors and algorithmic trading, which improve the customer experience. AI-powered chatbots are also used for customer service, providing personalized assistance and faster response times

AI & Fintech

- **Risk Management and Fraud Detection:** AI-based systems help fintech companies **identify threats, prevent fraud, and assess financial risks**. Machine learning algorithms can analyse vast amounts of data to detect patterns and anomalies, enabling proactive risk management.
 - **Blockchain** is a bonus-track: Enhanced Data Security, Improved Data Quality and Trust, Data Monetization and Privacy, Smart Contracts.
 - **Blockchain + AI-based Systems → Innovation**
- **Automation of Routine Tasks:** AI-based systems automate routine procedures in fintech, **reducing manual effort and increasing operational efficiency**.
 - This includes tasks like data entry, document processing, and compliance check.
 - This allows for more efficient use of resources and improved profitability

Regulating is not always easy, regulating algorithms even less

Rule of Law should protect people, not government

- “At its most basic, the rule of law is a tool to protect citizens against their Government – to ensure it does not treat them unfairly, or arbitrarily deprive them of their rights. But what is the point of this system of protection if it can then be undermined by a government unwilling to respect people’s human rights?”

The Collingridge's dilemma

- When a technology is new, its impacts are difficult to assess.
- When technology is widely used, it is already too late to control (regulate) it.

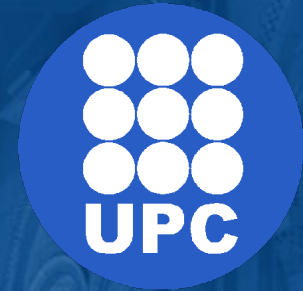
What happens if a technology is NOT perceived, you live with its impacts and no one tries to control (regulate) it?



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