

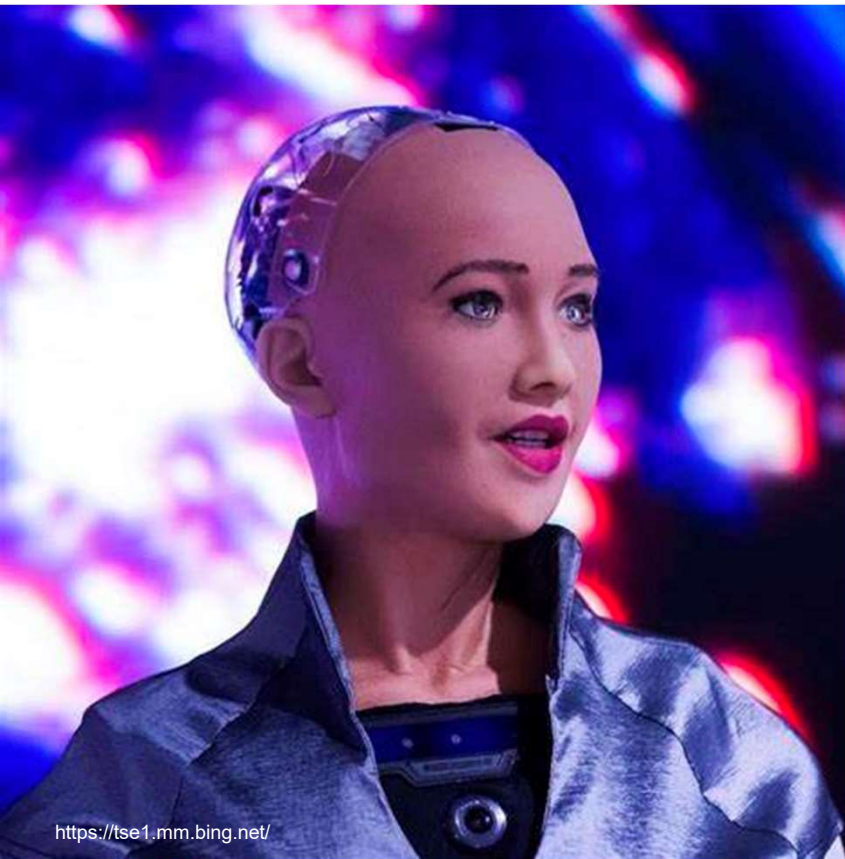


Conditions for effective deployment of AI technology in projects

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How intelligent? - Physicality



Ben Groetzel, OpenCOG (2008), SingularityNET (2017), Hanson Robotics, etc.



What do we mean by AI?

From IBM Cloud Education, 3 June 2020

Ref. A. M. Turing (1950) Computing Machinery and Intelligence. Mind 49: 433-460

- Turing is referred to as the "father of computer science"
- Asks the following question: "Can machines think?"
- Suggests a test, now famously known as the "Turing Test", where a human interrogator would try to distinguish between a computer and human text response
- While this test has undergone much scrutiny since its publication, it remains an important part of the history of AI

Setting boundaries

Comparing to human ability - measurable so excludes: soul, spirituality, consciousness. Basically only brain functions

Types of AI

Replicate human tasks - e.g. implemented as rule-based systems

Learning with experience - self-learning - e.g. neural networks

Self-reconfiguring / self-generating software

Application areas

Diagnose (EBM)

Epidemiology (early outbreak detection)

Pattern recognition (skin cancer)

EEG/ECG

Facial expression

Finance

(traditional stocks - up to 70%,
crypto - up to 80% - trade bots)

AI relates to humans

Systems that think like humans

Systems that reason like humans

Systems that feel like humans

Systems that react like humans

But is this the AI we are creating?

Ubiquitous algorithms

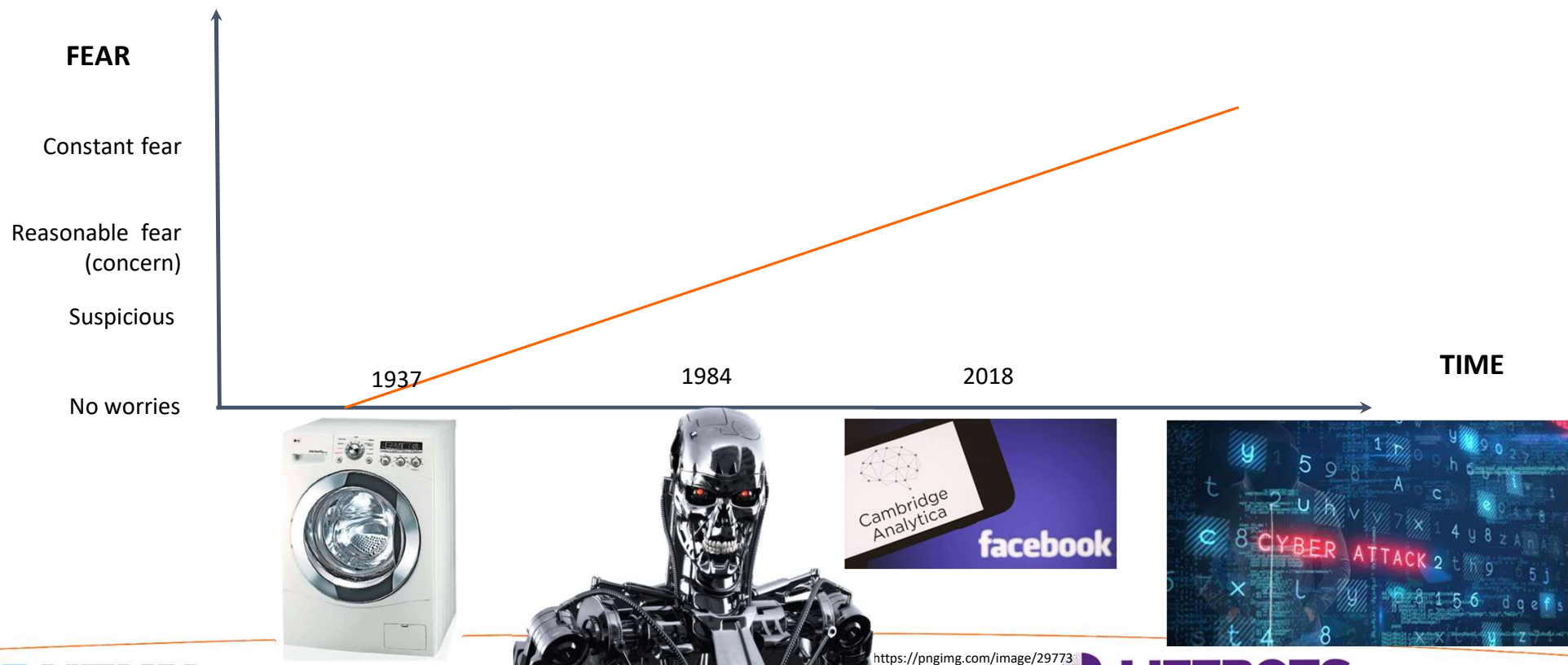
“unlimited” data access

Enormous processing power

“The processing power of the human brain is actually on the order of a few *petaflops*.” (Patrick Julius, 2016)

Cray/HPE Frontier (2022): 1102 petaflops

Technology advancement vs. fear



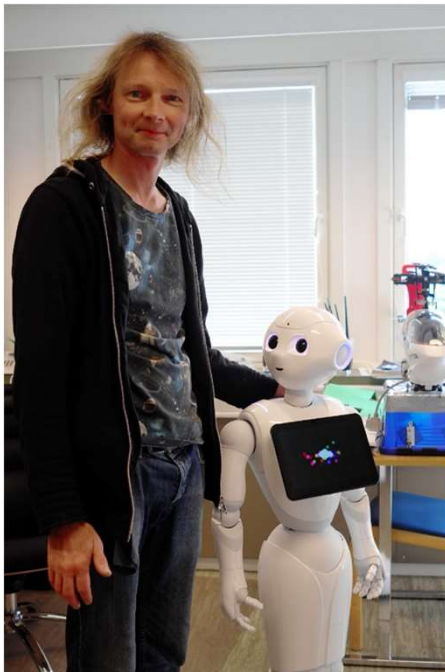
Hope



How can a care robot help?

- Looking after (not surveillance!)
- Calling for help - adverse situation detection
- Co-worker – helping the person & helping the carer
- Therapeutic instrument
- Companionship – a friend?

Meet the robots





IMRO-LAB

www.imrolab.eu



Enjoy
togetherness!



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Project coordinator



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