

MOTIVATION

IF A PRETTY POSTER AND A CUTE SAYING ARE ALL IT TAKES TO MOTIVATE YOU, YOU PROBABLY HAVE A VERY EASY JOB. THE KIND ROBOTS WILL BE DOING SOON.

Future of Artificial Intelligence

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Pop Quiz: Magellan, the explorer, went around the world three times. On one of his trips, he died. Which trip did he die?

[A 1.5min montage video of accomplishments of AI]

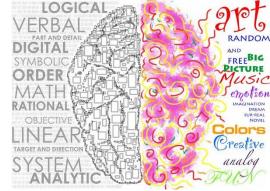
What is "Intelligence" anyway?

Clearly that indefinable quality that you have and your bozo friends don't...

Magellan, the explorer, went around the world three times. On one of his trips, he died.

Question: Which trip did he die in?

Many Intelligences..



- Perceptual & Manipulation tasks that seem to come naturally to us
 - Form the basis for the Captchas..
 - But rarely form the basis for our own judgements about each other's intelligence
- Emotional Intelligence
- Social Intelligence...
- Cognitive/reasoning tasks
 - That seem to be what we get tested in in SAT etc.



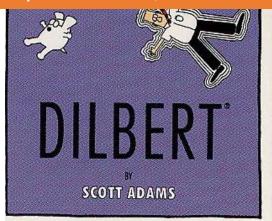


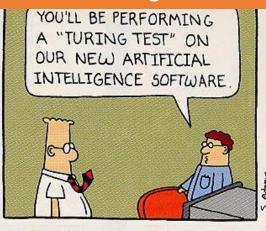


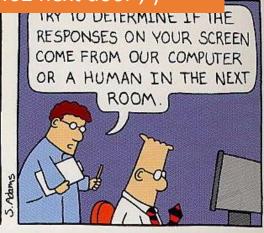
When is a computer Intelligent?

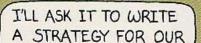
- When it does tasks that, when done by a human, would be seen as requiring intelligence..
 - Nice circular definition ©

Open only for Humans; Droids and Robots should go for CSE 462 next door ;-)

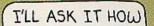




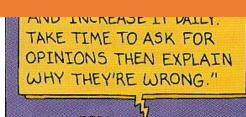








Turing test is more a test of human gullibility than of human intelligence







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What is AI?

Systems that think like humans	Systems that think rationally
Systems that act like humans	Systems that act rationally

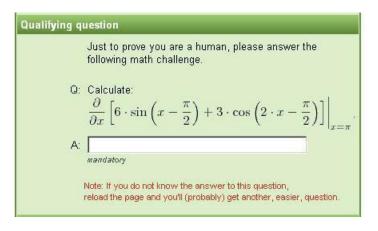
Al's progress towards intelligence

- 80's --- Expert systems
 - Rule-based systems for many businesses
 - Lisp Machines—the GPUs of 80's!
- 90's -- Reasoning systems
 - Dethroned Kasparov
- 00's: Perceptual tasks
 - Speech recognition common place!
 - Image recognition has improved significantly
- Current: Connecting reasoning and perception

Notice the contrast.. Human babies master perception before they get good at reasoning tasks!

If you want to know limits of AI, look at the Captcha's!

 Al could imitate experts earlier than it could imitate 4 year olds..







Birthday (required)		
March	▼ 31	▼ 1981
Human test (required	i)	
Type in the text you se	e in the box below.	
SCHOOL SCHOOL		
Sorry, your text ar	nd the image didn't match.	Please try again.
Read (really!)		

Still Elusive Commonsense

When did Magellan Die?

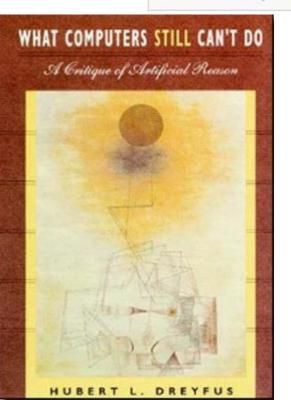


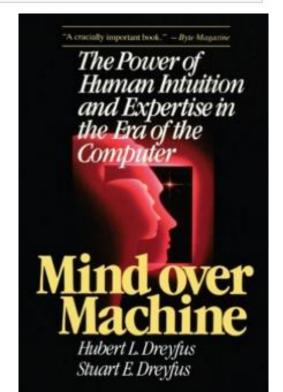


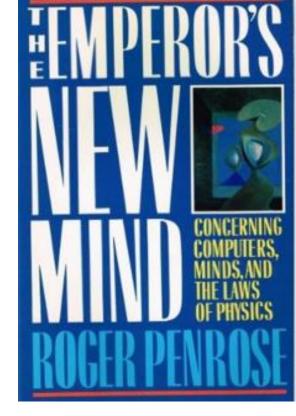




In this thought experiment, a person in the "Chinese room" is passed questions from outside the room, and consults a library of books to formulate an answer









I'd rather learn from one bird how to sing than teach ten thousand stars how not to dance.

(E. E. Cummings)

izquotes.com

Musk, Wozniak and Hawking urge ban on warfare AI and autonomous weapons

More than 1,000 experts and leading robotics researchers sign open letter warning of military artificial intelligence arms race



Netflix's Hastings: Battle for machines and genetically m

CHRIS O'BRIEN IANUARY 18, 2016 3:41 AM



∾ Oscar Wilde ∾

in between

that went

from barbarism to decadence

> AI is the only tec from disappoint ent to without touching beneficia

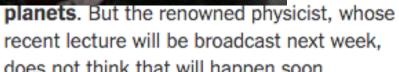
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Artificial Intelligence

and

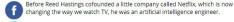
Technological Unemployment

recent lecture will be broadcast next week, does not think that will happen soon.



BBC News >





has come a long way since Hastings got his masters from Stanford University 1988. But he still follows developments in the field closely. And during a conversation on stage today at the DLD Conference in Munich, Germany, lastings said he was far less worried about looming threats of an Al-triggered ocalypse than are many other observers, such as Tesla's Elon Musk.

Some people worry about what happens when machine intelligence is too strong," Hastings said. "That's like worrying about our Mars colony and people







Space Act Agreement with NASA Ames Research Center





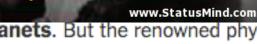












Why we don't need to overworry...

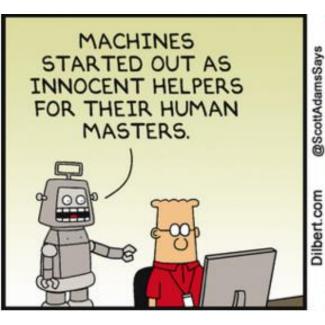
Captain America to the Rescue?



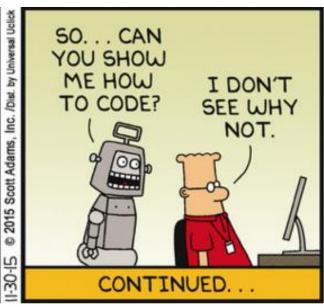


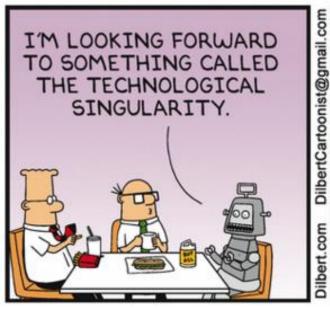
Why we don't need to over-worry...

- We already have autonomous systems; making them intelligent can't be bad!
- Al vs IA: We can work on technologies that make robots collaborate with humans!
 - Why deliberately set out to invent a dystopian future and be all paranoid about it?
- We don't need to give them the same exact survival instincts (e.g. Asimov's laws)
- The way to handle possible problems with Al are to allow multiple Als
- Technological unemployment is a big concern...
 - ..but even here, the opinion is divided
 - "biased advantages" vs. "rising tide lifts all boats"









THAT'S WHEN ROBOTS
WILL LEARN TO PROGRAM THEMSELVES AND
BECOME A SUPERINTELLIGENT SPECIES
THAT COMPETES WITH
HUMANS FOR LIMITED
RESOURCES.

