

Will Al Kill Us All?

Machine Learning: Jordan Boyd-Graber University of Maryland

Ideas Adapted from Rodney Brooks

What is the threat?

- General Artificial Intelligence (AGI)
- Singularity
- Misaligned Objectives
- Pure Evil
- Societal Upheval

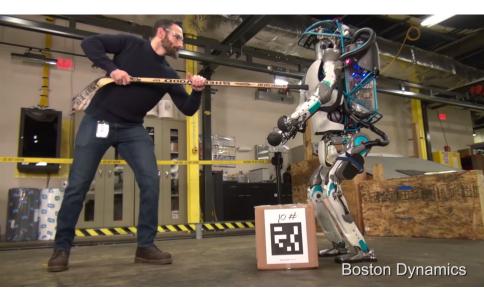
It will take a while

Rodney Brooks

Most technologies are overestimated in the short term. They are the shiny new thing.

Not all technologies get underestimated in the long term, but that is most likely the case for Al. The question is how long is the long term.





Humans are jerks

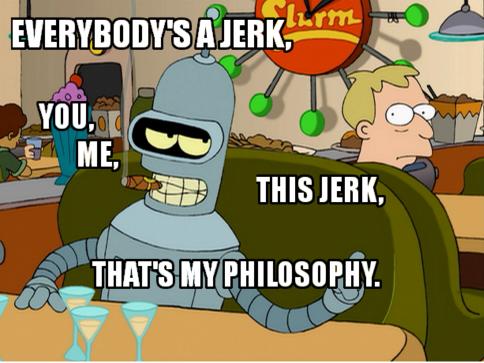




Humans are jerks



Governments are bigger jerks

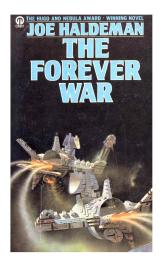


Prediction 1: Building Immune System

- Bad things will happen
- Al may be involved
- But prime mover will be human
- Will cause us to take cybersecurity seriously



Technology changes but society doesn't



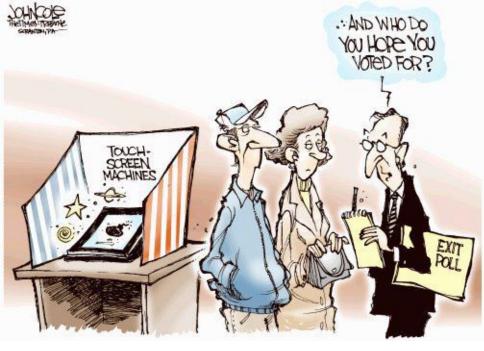
A book that gets it right

Prediction 2a: Physical Harm from Special-Purpose Al

- Special-purpose AI will be used for terror
- Will be scary
- We may overreact
- But utility clear
- Not an exestential threat (c.f. nuclear weapons)



But that isn't a new threat ...



Political process at risk internally



Political process at risk externally

Prediction 2b: Social Manipulation

- Will happen (is happening?)
- But will be slow
- Will be scaled up version of what humans already do
- Hopefully we will build defenses

World ence estival World

Scien Fes

Renaissance, Two Sigma, Voleon

Prediction 2c: Financial Manipulation

- Is already happening
- But happening from many directions
- Efficient markets
- Human irrationality

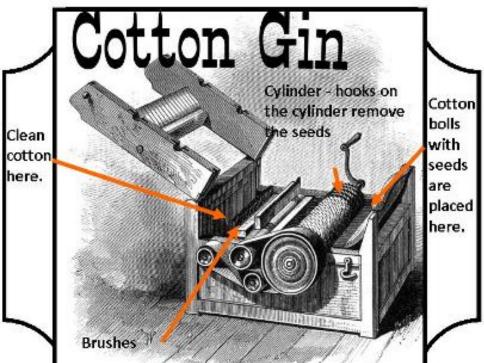


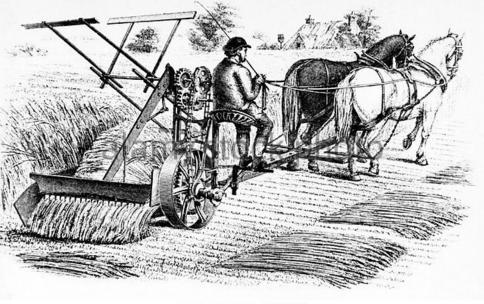
What about AI that does everything?

Prediction 3: AGI

- If AGI happens, society will be very different
- Special purpose AI will exist to prevent takeover (previous prediction)
- Analogy: antibacterial soap







www.alamy.com - B7ACCW

Don't fear the reaper





Industrialization reordered society



Automation **slowly** taking hold



Are we prepared for social changes?

Prediction 4

- Education has not changed from what we needed for assembly line
- Al could worsen inequality
- Society needs to restructure
 - Bad: Massive unemployment and misery
 - Good: Redistribution
 - Great: Allow humans to focus on creativity



(-11 177330) a man is holding a skatehoard in the air

What should ML researchers do?

- Support creativity
- Help others understand how much ML sucks
- Build the foundations of the world your (grand)children want to live in
- Make AI interpretable and accountable