AI: Ethical and Societal Challenges – and a MOOC

MARIA HEDLUND & ERIK PERSSON

LUNDS UNIVERSITET

AI: Ethical and Societal Challenges – and a MOOC

This is a short presentation about some ethical and societal challenges in AI – and a Massive Open Online Course (MOOC) where you can learn more.

AI: Ethical and Societal Challenges – and a MOOC

Let us start with the MOOC

- Commissioned by the Swedish government.
- Initiated by the Lund University leadership and AI Lund.
- Implemented through the Department of Commissioned Education.
- Aiming at professionals who work with AI but do not have to be AI experts (in any sense of the word).

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The MOOC

Free but possible to take as a paid diploma course.

https://www.coursera.org/learn/ai-ethics

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Teachers:

- Maria Hedlund, Political Science
- Erik Persson, Philosophy
- Lena Lindström, Psychology

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Content:

- Algorithmic Bias
- Surveillance
- Democracy
- Artificial consciousness
- Responsibility
- Control

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Algorithmic Bias

Algorithms are cheaper, faster, better.

They don’t get tired, hungry or greedy.

They never lose focus and they never lose their temper.

They have no prejudice, hate or bias.

”Only logic – no values”

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Algorithmic Bias

”Only logic – no values”

… OR?

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Algorithmic Bias

Recruitment

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Algorithmic Bias

Algorithms are *not* value free.

Algorithms *cannot* be value free.

The real challenge is not to avoid values but to understand how and which values are built into algorithms.

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Surveillance

What AI is really good at is pattern recognition

This comes handy for surveillance

Are there reasons to worry?

”I have nothing to hide”

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Surveillance

Some reasons to worry

Government control

Risk of discrimination

Conformism and loss of individual variation

Unease and discomfort

Violation of privacy

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Surveillance

”Ultimately, saying that you don’t care about privacy because you have nothing to hide is no different from saying you don’t care about freedom of speech because you have nothing to say.”

Snowden (2019)

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Democracy

Is AI a threat to democracy?

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Democracy

Why democracy?

Self-determination

Peaceful way to reach agreements

The rules of the game settled by those concerned

Remove bad leader

Decide on which society we want

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Democracy

Why AI can be a threat to democracy – example 1

AI systems and social media can nurture repressive regimes

Effective way of rigging elections

And keeping popular civic movements under control

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Democracy

Why AI can be a threat to democracy – example 2

”Government by discussion”

Internet and social media open up public space

But constrains the room for meeting opposition

Breeding ground for disinformation and conspiracy theories

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Responsibility

Focus on moral, not legal responsibility.

Two versions:

Backward-looking responsibility

Forward-looking responsibility

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Backward-looking responsibility

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Backward-looking responsibility

Who is responsible?

- The car?
- The pedestrian robot?
- The manufacturer of one or both?
- The human in the car?
- The organisers of the fair?
- The law makers of the state of Nevada?

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Backward-looking responsibility

- The devices in question are more autonomous than we are used to but less autonomous than humans:
  - Less control by the user
- The AI systems are partly developed through machine learning:
  - Less control by the manufacturer
  - Less transparency

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Backward-looking responsibility

What does it take to be causally responsible?

- Do you have to act?
- Do you have to be present?
- What if it takes more than one mistake or faulty decision?

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Backward-looking responsibility

What does it take to be morally responsible?

- Causal responsibility
- Ability to do otherwise
  - Free will
  - External restrictions (handicap, physical constraint, threat)
- Understanding objective consequences
- Understanding subjective consequences
- Understanding relevant moral principles

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Forward-looking responsibility

Responsibility for the future

What can we do now to avoid that things go wrong in the future?

How to distribute forward-looking responsibility for AI development?

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Forward-looking responsibility

Basic requirement: to be able to influence

AI developers, programmers and designers, AI companies, users, professional organisations, international organisations

Political balancing of interests: governments responsible in a forward-looking way

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Forward-looking responsibility

But influence does not say anything about the distribution

Need some values to guide the distribution

Which values?

Fairness? For whom?

Equality? Of what?

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Forward-looking responsibility

Distribution also needs to be efficient

Being in the position to act

Being concerned by the effects of AI

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The Control Problem

Humans can control animals and machines much stronger and faster than we are.

Humans can even control machines with a superior domain specific intelligence.

Why is that?

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The Control Problem

Common answer: General intelligence

Do we really want to give away this advantage – our only superpower - by making AGI that exceeds our own?

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The Control Problem

Do we really want to give away this advantage
by making AGI?

Huge advantages but how to control it?

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The Control Problem

Answer 1: Don’t worry!

- It won’t happen
- It will take a long time.
- It will be a good thing.

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The Control Problem

Answer 1: Don’t worry!

Problems:

- We don’t know if it will happen or how long it will take.
- Policy making, law making and ethics is usually slower than technology deelopment.
- They may not value the same things as we do.

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The Control Problem

Answer 2: The off-switch

Problems:

- Self-hacking
- Persuasion
- Copying
- Preemptive strike

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The Control Problem

Answer 3: Boxing

Problems:

- Limits its usability
- Persuasion

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The Control Problem

Answer 4: Value alignment

Problems:

- How?
- Which values?
- Perverse instantiations
- A system that can learn can change its values
- What if it concludes that our values are wrong?

Distribution of Responsibility for AI Development (DRAID)

Forskningsprojekt vid Lunds universitet

Projekthemsida:
https://www.svet.lu.se/en/research/research-projects/how-will-different-distributions-of-responsibility-affect-the-long-term-development-of-artificial-intelligence

Researchgate:
https://www.researchgate.net/project/Distribution-of-Responsibility-for-Artificial-Intelligence-Development-DRAID

Facebook:
https://www.facebook.com/groups/2324127717915542/

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