WEEK 12 – Session 4

Ethical challenges of AI

Today, artificial intelligence is essential across a wide range of industries, including healthcare, retail, manufacturing, and even government.

But there are ethical challenges with AI, and as always, we need to stay vigilant about these issues to make sure that artificial intelligence isn't doing more harm than good.

Here are some of the biggest ethical challenges of artificial intelligence.

- Biases
- Control and the Morality of AI
- Privacy
- Power Balance
- Ownership
- Humanity

Biases

We need data to train our artificial intelligence algorithms, and we need to do everything we can to eliminate bias in that data.

We know that Bias is possible when you favour one side and for that you need to think. This means that to be biased we need to have thinking ability and Machines do not have that.

So How can machines be Biased ?

Well, This is possible because as **machines can't** think but the **developer can**. The person who developed the machine can have his own biases.

The biases of a developer can transfer into the machine through the Algorithms.

Control and the Morality of AI

As we use more and more artificial intelligence, we are asking machines to make increasingly important decisions.

The same is true for autonomous cars. They need to react immediately if a child runs out on the road, so it's important that the AI is in control of the situation. This creates interesting ethical challenges around AI and control.

Privacy

Privacy (and consent) for using data has long been an ethical dilemma of AI. We need data to train AIs, but where does this data come from, and how do we use it?

For example, Barbie now has an AI-enabled doll that children can speak to. What does this mean in terms of ethics? There is an algorithm that is collecting data from child's conversations with this toy. Where is this data going, and how is it being used?

As we have seen a lot in the news recently, there are also many companies that collect data and sell it to other companies. What are the rules around this kind of data collection, and what legislation might need to be put in place to protect users' private information?

Power Balance

Huge companies like Amazon, Facebook, Google, are using artificial intelligence to squash their competitors and become virtually unstoppable in the marketplace.

Balancing that power is a serious challenge in the world of AI.

Ownership

Who is responsible for some of the things that AIs are creating?

We can now use artificial intelligence to create text, bots, or even deep fake videos that can be misleading. Who owns that material, and what do we do with this kind of fake news if it spreads across the internet?

We also have AIs that can create art and music. When an AI writes a new piece of music, who owns it? Who has the intellectual property rights for it, and should potentially get paid for it?

Humanity

Artificial intelligence has now gotten so fast, powerful, and efficient that it can leave humans feeling inferior. This issue may challenge us to think about what it actually means to be human.

These are some of the key ethical challenges that we all need to think about very carefully when it comes to AI.

AI code of ethics

The Code of Ethics in the Field of Artificial Intelligence establishes the general ethical principles and standards of conduct that should be followed by participants in relation to the field of artificial intelligence in their activities, as well as the mechanisms for the implementation of the provisions of this Code.

PRINCIPLES OF ETHICS AND RULES OF CONDUCT

1. The main priority of the development of AI technologies is protecting the interests and rights of human beings collectively and as individuals

    1.1. Human-centered and humanistic approach.

        In the development of AI technologies, the rights and freedoms of the individual should be given the greatest value.

        A human-centered and humanistic approach is the basic ethical principle and central criterion for assessing the ethical behavior of AI developers.

    1.2. Respect for human autonomy and freedom of will.

        AI Actors should take all necessary measures to preserve the autonomy and free will of a human‘s decision-making ability, the right to choose, and, in general, the intellectual abilities of a human as an intrinsic value and a system-forming factor of modern civilization.

    1.3. Compliance with the law

        AI developers must know and comply with the provisions of the legislation in all areas of their activities and at all stages of the creation, development and use of AI technologies, including in matters of the legal responsibility of AI Actors.

1.4. Non-discrimination

To ensure fairness and non-discrimination, AI developers should take measures to verify that the algorithms, datasets and processing methods for machine learning that are used to group and/or classify data concerning individuals or groups do not intentionally discriminate.

1.5. Assessment of risks and humanitarian impact.

AI developers are encouraged to assess the potential risks of using an AIS, including the social consequences for individuals, society and the state, as well as the humanitarian impact of the AIS on human rights and freedoms at different stages, including during the formation and use of datasets.

2. Need for conscious responsibility when creating and using AI

2.1. Risk-based approach.

The level of attention to ethical issues in AI and the nature of the relevant actions of AI developers should be proportional to the assessment of the level of risk posed by specific technologies and AISs and the interests of individuals and society. Risk-level assessment must take into account both the known and possible risks; in this case, the level of probability of threats should be taken into account as well as their possible scale in the short and long term.

2.2. Responsible attitude.

AI Actors should have a responsible approach to the aspects of AIS that influence society and citizens at every stage of the AIS life cycle. These include privacy; the ethical, safe and responsible use of personal data; the nature, degree and amount of damage that may follow as a result of the use of the AI; and the selection and use of companion hardware and software.