Some review questions

Lecture 1

Discuss the case of using publicly gathered data from the internet to train a facial recognition algorithm to be used by the police. Which, if any, of the Four Principles from the Belmont Report is threatened by such a project? Briefly justify your answer with regard to at least two of the Four Principles.

Lecture 1

What are two important features that the Universal Declaration of Human Rights, and the Belmont Report, have in common?

Lecture 2

What is the practitioner’s definition of artificial intelligence, from our textbook CHLEP? What two main elements must be present?

Lecture 2

Describe an example that illustrates a failure of “robustness” of an AI model.

Lecture 2

Consider the following text:

- “The AI Act falls short of civil society’s demand to ensure that EU-based AI providers whose systems impact people outside of the EU are subject to the same requirements as those inside the EU. The Act does not stop EU-based companies from exporting AI systems which are banned in the EU, therefore creating a huge risk of violating rights of people in non-EU countries by EU-made technologies that are essentially incompatible with human rights. Additionally, the Act does not require exported high-risk systems to follow the technical, transparency or other safeguards otherwise required when AI systems are intended for use within the EU, again risking the violation of rights of people outside of the EU by EU-made technologies.”

What normative premise is needed in order for the conclusion of this argument to follow (i.e., that the AI Act is too weak)?

Lecture 2

Which of the following claims is characteristic of Classical AI as advocated by Alan Turing? (Choose all that apply.)

- AI actually has a mind and cognition.
- AI always automates particular tasks, never general capacities.
- Any feature of human intelligence can be built into AI.
- We cannot learn about human cognition by building AI.

Lecture 3

In your opinion, is the assignment project that you carried out this quarter an example of applying Design for Values, or not? Give specific reasons for your answer, relating to the features of Design for Values.

Lecture 3

- When carrying out Design for Values in relation to AI-driven military technology, where do the values come from? Give a specific example of a technology design process in this domain, together with a suggestion for what source(s) of values could be used in relation to that technology design process.

Lecture 4

According to Rawls, fairness is what would result from a procedure in which the basic principles of society are decided by people who do not know which position in society they will go on to occupy. Can this conception of fairness be applied to determine what models are more or less fair (for example in the case of a model that determines the risk of loan defaults for particular combinations of bank clients and mortgage products)? Why or why not?

Lecture 5 Matching

Column A: Concepts	Column B: Definitions
1. Negligence	A. Responsibility assigned for future tasks or roles
2. Strict Liability	B. Liability without need to prove fault
3. Product Liability	C. Requires proof of duty of care and breach
4. Passive Moral Responsibility	D. Based on causal contribution, freedom, foreseeability, and wrongdoing
5. Active Moral Responsibility	E. Applies to manufacturers for defects regardless of negligence
6. Collective Responsibility	F. Shared responsibility where no individual can be reasonably blamed
7. Legal Liability	G. Obligation to pay fines or damages under law

Lecture 5

According to new proposed “Recommendations on a civil liability regime for artificial intelligence”, the European Parliament proposes that “a human operator will **not** be liable for harm or damage from an AI system if he or she can prove that … *due diligence* was observed by performing all the following actions: selecting a suitable AI system for the right task and skills, putting the AI system duly into operation, monitoring the activities, and maintaining the operational reliability by regularly installing all available updates” (CHLEP p. 162). In your opinion, could there be cases in which the human operator is **morally** responsible for harm or damage, even though she was not **legally** responsible because she meets the conditions above? Support your answer either by providing a case that illustrates it, or by giving a valid argument with plausible premises.

Lecture 6

Which of the following statements best expresses ***anthropocentrism*** about the value of sustainability? (Choose one.)

- “Humans should try to ensure the happiness of animal life, because animals are capable of suffering.”
- “We have to protect nature for the sake of future generations.”
- “We have to protect nature because it has intrinsic value.”
- “Humans have become too powerful and controlling in how they manage environmental resources.”

Lecture 6

Which sustainability impacts of AI are particularly captured by Kate Crawford's "Atlas of AI"? (Choose all that apply.)

- The impacts of mining for rare earth elements needed to run AI.
- Impacts on engineers working for big tech companies.
- The benefits of sustainable energy sources such as wind and nuclear power.
- The impacts of data servers.

Lecture 6

Which kinds of harms do Hasselbalch & van Wynsberghe mean to designate when using the term “data pollution”?