

SIT799 Human Aligned Artificial Intelligence

Pass Task 2.1: Ethics in AI Quiz

Overview

During week 2, you have been introduced to Ethics and Ethics in AI. As we have discussed AI can have controversial applications and thus may induce serious ethical issues in its employment. This quiz gives you a chance to demonstrate your understanding of what you have learned.

Quiz

For each of the following scenarios, indicate the possible ethical issues that you may have to address. **Please justify your answers in no more than 5 sentences.**

1. You are asked to work on a project that aims to develop an AI system that will assist doctors during complex surgeries.
Accountability, informed consent, and patient safety are examples of ethical concerns. Since an AI error could have fatal consequences, developers must guarantee accurate verification and transparency. Whether the surgeon or the AI developer is legally liable must also be made clear. Medical workers run the risk of depending too much on AI. Making sure the patient understands how AI is being used to treat them is also important.
2. You are asked to work on a project that aims to build a computer vision system for person identification.
This brings up issues with privacy, monitoring, and possible misuse. Governments and businesses may misuse these systems for racial profiling or mass spying. Unfair treatment may result from bias in facial recognition models, which can raise error rates for particular groups. The collection, storage, and usage of data must be considered by developers. In this situation, consent and data protection are crucial moral responsibilities.
3. You are asked to work on a project that aims to build automatic driving vehicles.
Safety, making decisions in life-or-death circumstances, and liability are ethical issues. Autonomous cars need to be designed to make moral decisions in an instant, such whether to hurt passengers or pedestrians. Another issue is who is responsible for an accident—the user, the developer, or the manufacturer. Furthermore, to guarantee reliability in a variety of settings, AI models need to be trained on objective, varied data. Regulatory compliance and public trust are also crucial.
4. You are asked to work on a project that aims to build a speech recognition tool.

Consent, bias in recognition accuracy, and data privacy are important ethical concerns. Speech data must be safely stored and not misused because it frequently contains personal information. For individuals with accents or speech difficulties, bias in voice recognition may lead to reduced accuracy and exclusion. Notifying users that they are being filmed or watched is crucial. Additionally, developers need to make sure that all languages and dialects are treated equally and inclusively.