



Ethical Considerations in AI



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01

Algorithmic Bias



Algorithmic Bias

1 Definition and Examples

- Q1: Define algorithmic bias and provide two examples of how it manifests in AI systems.

2 Transparency vs Explainability

- Q2: Explain the difference between transparency and explainability in AI. Why are both important?

3 GDPR Impact

- Q3: How does GDPR (General Data Protection Regulation) impact AI development in the EU?

02

Ethical Principles Matching

Principles and Definitions

Match the following principles to their definitions:



A) Justice



B) Non-maleficence



C) Autonomy



D) Sustainability

| Principle | Definition |
|-----------|--|
| A | Fair distribution of AI benefits and risks |
| B | Ensuring AI does not harm individuals or society. |
| C | Respecting users' right to control their data and decisions. |
| D | Designing AI to be environmentally friendly. |

03

Case Studies



Case 1: Biased Hiring Tool

Scenario

Amazon's AI recruiting tool penalized female candidates.



Case 1: Biased Hiring Tool

Tasks

Identify the source of bias
(e.g., training data, model
design).

Propose three fixes to make
the tool fairer.

Suggest metrics to evaluate
fairness post-correction.



Case 2: Facial Recognition in Policing

Scenario

A facial recognition system misidentifies minorities at higher rates.



Case 2: Facial Recognition in Policing Tasks

Discuss ethical risks (e.g., wrongful arrests, privacy violations).

Recommend policies for responsible deployment.

04

Personal Reflection



Personal Reflection

Prompt

Reflect on a personal project (past or future). How will you ensure it adheres to ethical AI principles?

05

Policy Proposal

Policy Proposal

Policy Proposal

Draft a 1-page guideline for ethical AI use in healthcare.
Include:

- Patient consent protocols.
- Bias mitigation strategies.
- Transparency requirements.



The background is a solid green color with a series of smooth, flowing, wavy lines that create a sense of movement and depth. The lines are in various shades of green, from a light, almost white-green to a darker, forest green, giving the impression of layers or a 3D effect.

Thank You