# **ETHICAL FRAMEWORKS OF AI** Website -- distancediary.com YouTube – easy2learn with jyoti

### Framework & Al Framework

A Framework is a *roadmap* that gives *structured guidance* on solving complex problems by specifying clear principles and steps to align actions with goals. An AI framework outlines the key steps needed to create responsible AI systems.

### **Ethical Framework**

- An Ethical Framework refers to a system of principles and guidelines that helps individuals or organizations determine what is right and wrong, guiding them in making moral decisions and taking ethical actions.
- When a framework weaves the principles of ethics in AI, it is known as an Ethical framework.
   An ethical framework in AI helps address key concerns like fairness, privacy, answerability,
  - and transparency.
  - It ensures that AI systems follow moral guidelines, respecting human rights and societal values.
- For example, suppose a company develops AI to screen job applications. Without guidelines, the AI might favour certain groups due to biased training data (e.g., male candidates over female ones). An ethical framework would guide the company to check and correct this bias, ensuring equal opportunities for all applicants.

# Ethical AI Frameworks typically include the following components:

**1. Principles** – These are the core value that guide ethical decisions, such as fairness, transparency, and Privacy.

### i. Fairness -

Example: An AI system used for loan approval should not discriminate based on gender, race, or age. An ethical framework would ensure that the data and algorithms used are audited to prevent such biases and ensure equal treatment of all applicants.

### ii. Transparency -

*Example:* If a student is denied admission by an AI-based selection tool, the system should be able to explain why. An ethical framework would require the AI to provide clear, understandable reasons behind its decisions, making the process transparent to users.

# iii. Privacy & Security -

*Example:* A healthcare AI system that analyzes patient records must not leak sensitive personal information. An ethical framework ensures that such systems encrypt data, get proper consent, and comply with data protection laws to maintain privacy and security.

- **2. Guidelines.** These refer to the *practical advice for applying principles in real-world Al development*. For example, regularly auditing Al systems to detect and remove discriminatory biases, or misuse of Al, and ensuring the right alignment of values.
- (i) Value Alignment. Al should align with human values and avoid spreading false or harmful information. It must be designed to provide accurate and helpful content.
- For example, if an AI chatbot spreads fake news or harmful advice, it can cause panic or danger.

  AI must be designed to share correct, useful information instead.
- (ii) No Misuse. Al can be misused to create harmful or fake content like deepfakes, which can damage reputations. Strict rules are needed to prevent such misuse.
- For example, AI can create deepfake videos that show people saying things they never said.

  This could damage their reputation. To stop this, there should be strict rules on how AI tools can be used
- (iii) Data Laws. Al must follow data usage and sharing laws to avoid legal issues. Sharing personal data without permission can lead to serious consequences.
  - For example, in some countries, personal data like your name and address can't be shared without your permission. If an AI company ignores this rule, it could face legal trouble.
  - 2. Assessment Tools. Assessment tools, such as impact assessments and audits, help evaluate whether AI systems follow ethical principles. For example, banks can use checklists to ensure their AI does not unfairly reject loan applications from minorities.
  - **3. Governance Mechanisms.** Governance mechanisms involve *regulatory bodies or review boards* that oversee AI ethics. For Example, a healthcare organization may set up a board to review AI models used for patient diagnoses.

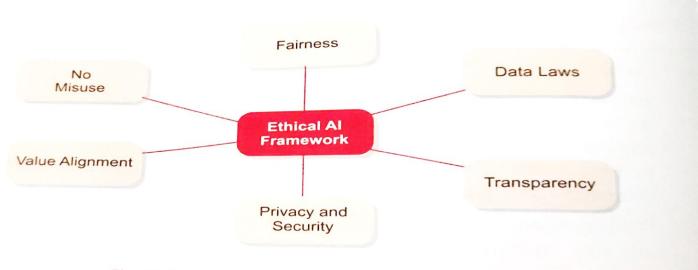


Figure 3.1 Ethical AI framework components

# Why Ethical frameworks are important in AI in terms of key principles:

### 1. Fairness and Unbias

Ethical frameworks help ensure that AI systems treat all individuals equally, preventing discrimination based on race, gender, age, or background. They promote fair algorithms and unbiased data use, especially in sensitive areas like hiring, lending, or law enforcement.

### 2. Transparency

- They promote openness by requiring AI systems to explain how and why decisions
  are made. This helps users and stakeholders understand the reasoning behind AI
- actions, increasing clarity and reducing confusion.

# 3. Privacy and Data Security

Ethical frameworks guide the responsible collection, storage, and use of personal data. They ensure AI respects users' privacy rights and follows data protection laws to avoid misuse or unauthorized sharing.

# 4. Accountability

They establish clear responsibilities for developers, organizations, and users, ensuring that humans remain answerable for AI decisions. This is crucial when errors or harm occur due to AI use.

# 5. Trust and Public Acceptance

By embedding ethical principles, these frameworks help build public confidence in AI systems. When people see that AI is fair, transparent, and respects their rights, they are more likely to accept and adopt it.

In summary, ethical frameworks are essential for guiding AI toward responsible use, building trust, and ensuring it benefits society without causing harm.

An Ethical Framework includes Principles, guidelines, assessment tools, and governance mechanism.