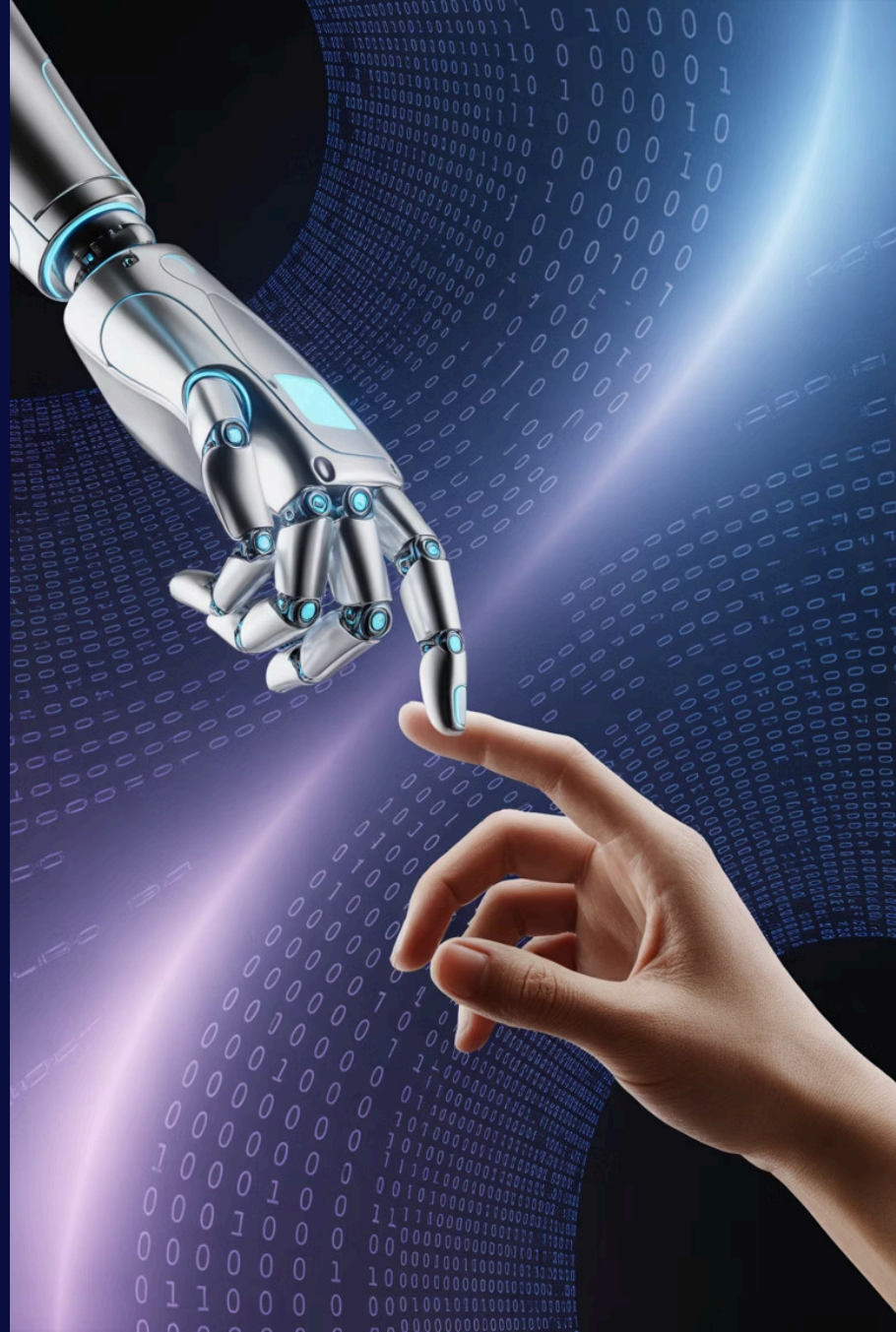
AI Ethics: Navigating the Moral Landscape

A critical exploration of artificial intelligence's ethical dimensions and societal implications. We'll examine how moral frameworks shape AI development and deployment.

by S MM



AI's Societal Impact

Employment

AI reshapes job markets. Automation replaces some roles. New positions emerge in AI development.

Privacy

AI systems collect vast data. Questions arise about consent, ownership, and surveillance.

Power Distribution

AI concentrates influence among tech giants. This raises concerns about democratic values.

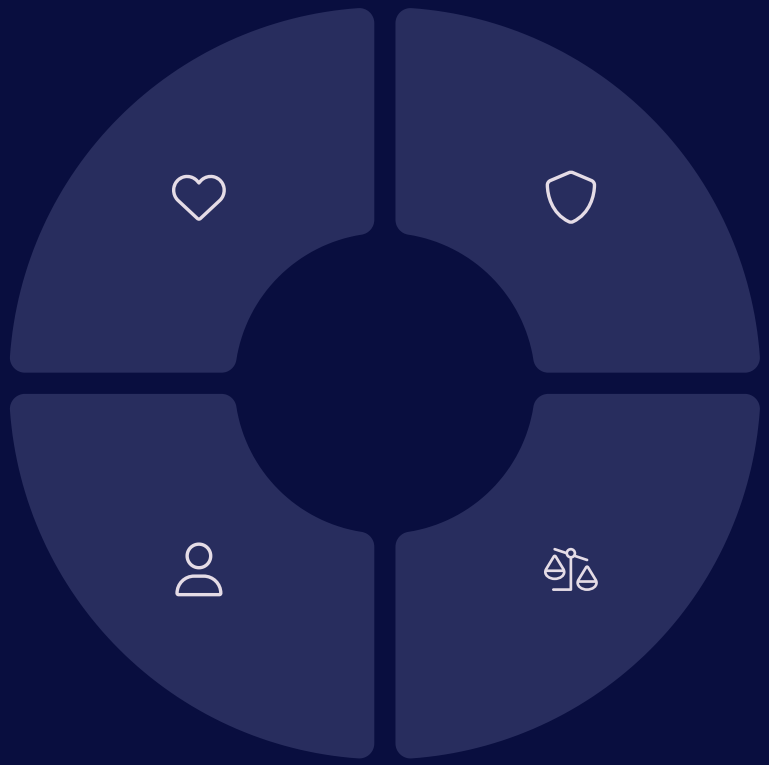
Core Ethical Principles

Beneficence

AI should actively promote human well-being. Systems must be designed to benefit humanity.

Non-maleficence

AI must avoid causing harm. Developers should anticipate negative consequences.



Autonomy

AI should respect human freedom. People deserve control over AI systems.

Justice

AI must distribute benefits fairly. Systems should not perpetuate existing inequalities.

Real-World Ethical Dilemmas

Autonomous Vehicles

Who should an autonomous car prioritize in unavoidable accidents? The trolley problem becomes real-world ethics.

- Passenger vs. pedestrian safety
- Algorithmic life-or-death decisions

Surveillance AI

Facial recognition systems balance security with privacy rights. Consent questions remain unresolved.

- Public space monitoring
- Potential for abuse

Predictive Policing

AI-based crime prediction systems risk reinforcing biases. Historical data often contains discrimination patterns.

- Algorithmic bias
- Justice system impacts

Human Morality's Influence on AI

Values Encoding

Human designers embed their moral frameworks into AI systems. These values shape algorithm decisions.

Programming Ethics

Developers translate abstract moral principles into code. This process requires careful consideration.

Oversight Mechanisms

Human moral judgment guides AI evaluation standards. Ethical review boards assess AI applications.

Moral Decision-Making in Machines

The Debate

Can machines truly make moral decisions? Or do they simply execute programmed instructions?

> Machines lack moral agency but wield significant moral impact.

Computational Morality

AI can process ethical frameworks but lacks moral understanding. Algorithms follow rules without comprehension.

Moral Responsibility Gap

Who bears responsibility for AI decisions? The designer, user, or machine itself?

Learning Objectives Assessment

1. **Identify Key Principles**

   Articulate the four core ethical principles governing AI development.

2. **Analyze Real Cases**

   Evaluate ethical dimensions of current AI applications in society.

3. **Debate Moral Agency**

   Develop arguments regarding machines' capacity for moral decision-making.

4. **Connect Human-Machine Ethics**

   Explain how human moral frameworks translate into AI design choices.

Discussion Questions

1 **Moral Agency**

What qualities would an AI need to possess true moral agency?

2 **Ethical Frameworks**

Which ethical tradition best guides responsible AI development?

3 **Responsibility Chain**

How should we distribute responsibility for AI decisions?

4 **Cultural Perspectives**

How do different cultural values influence AI ethics globally?

Prepare your thoughts on these questions for our next class discussion.