# 10 Ethics of AI

## Understanding Ethics

Ethics or moral philosophy is a branch of philosophy that "involves systematizing, defending, and recommending concepts of right and wrong behavior"

As we are human beings and we are following some moral principles for doing certain activities as well as to make our life comfortable with good manners and behavior. These concerns and principles related to good manners, good behavior is known as ethics. Similarly certain ethics are also associated wit system and tools.

These ethics are known as AI ethics. So finally AI ethics can be defined as following:

*AI ethics refers to the basic principles of AI system design that use the good code of conduct and produces the results.*

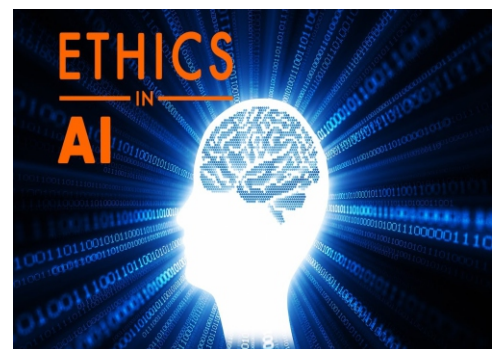In other words ethics means what is right and unethical means what is wrong.

Data is any set of characters that is gathered and translated for some purpose, usually analysis. It can be any character, including text and numbers, pictures, sound or video. If data is not into context, it does not do anything to a human or computer.

### Learning Outcomes

- Understanding Ethics
- Artificial Intelligence Ethics
- Robo Ethics
- Threats to Human Dignity
- AI Privacy
- AI Boons or Bane

## AI Ethics

Artificial Intelligence ethics, or a ethics, compromise of the set of values, principles and techniques which employee widely Accepted standard of right and wrong to guide the moral conduct in the development and deployment of artificial intelligence technologies. Ethics plays a major role in scientific research stem cell research, cloning, genetically modified food, nuclear technology.


ETHICS IN AI

**Fact Tip**

AI is already in movies such as Jarvis & vision from Avengers or the Terminator. All are  part of AI world in movies.

## ACTIVITY TIME

### Infinite Drum Machine   - Experiment Musical AI E  xperiments

Infinite Drum Machine   - Musical Al Experiments
It is built by the Google Creative Lab; the Infinite Drum Machine is a new way to create beats using everyday sounds.

1. Go to the following link:  https://experiments.withgoogle.com/ai/drum   -machineview/
2. Following screen appears, and click on start playing.
3. Click on the circle given, once you click they w   ill get highlighted and the beat is added to the list of beats to play.
4. Once you select the beats/highlighted the circle, click on play button.
5. The drum will start playing on the beats you have selected.

Myths prevailing around the concept of AI ethics are

- Loss of job due to automation.
- Human gets either too much or too little leisure time.
- Loss of sense of being unique.
- Loss of privacy rights.
- The accomplishment of AI will means the end of human race.

## Ethical concerns related to AI Access

If you are developing a system or a new technology, you may face some ethical issues related to that system or new technology. Similarly AI systems also facing these ethical concerns

When AI is coming to your way, you need to think about data management. This is the first concern because AI is mostly rely on data. The AI system is nothing without data.

Whenever you think about data you should think about their storage, collection, privacy and many more concerns.

Now a days internet has the entire world. We are using smartphones and internet. Daily we are accessing lots apps and websites. Can you answer these questions:

**When you install any app on your mobile what type of permissions the app is asking for?**
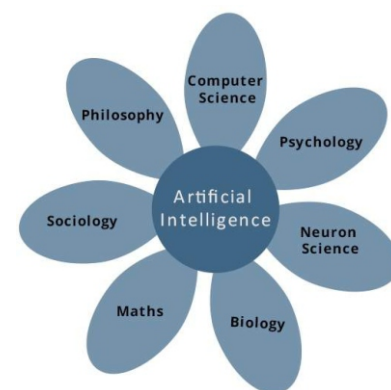
So the answers is as following:

- Contacts
- Location
- Email
- Storage
- Notes

and specific apps may ask even specific permission to allow.

## Components of a Good AI Policy

Good AI policy refers to the concerns which should be in consumer's favor. The following topics can be considered as good AI policy:
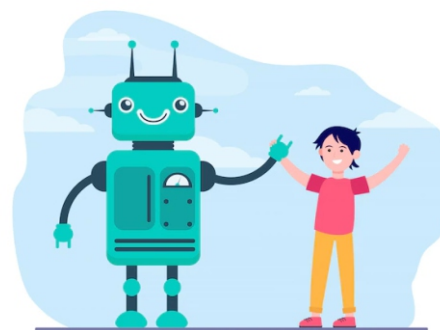
- Transparent System
- Right of data collection
- Freedom of leaving the system
- Design
- Data deletion

## Robot Ethics

Robot ethics, sometimes known as "roboethics", concerns ethical problems that occur with robots, such as whether robots pose a threat to humans in the long or short run, whether some uses of robots are problematic (such as in healthcare or as 'killer robots' in war), and how robots should be designed such that they act 'ethically'

**Robo Rights** is the concept that people must have some moral obligations towards the machine which is created artificially intelligent, similar to human rights or animal rights. Robot rights such as a right to exist and perform its own mission, can be linked to the robot duty to serve the human being, by linking it with human rights to human duties before society.

## AI Privacy

Once ability to control the digital data in terms of how it is stored, modified and exchanged between the different parties, Social agencies like the government and multiple cooperation can use different techniques to identify, profile and directly affect one's life without even them knowing about it. With advanced AI algorithms, such fears about these agencies being able to make an impact on our lives, is increasing.

AI works best when information gathering and computation are done at good speed which improves data analysis. What sounds scary is not being able to comprehend how much data devices generate, process and share which makes us potentially vulnerable to exploitation. AI can track and monitor personal and non personal data such as keeping track of facial and voice marks for recognition purpose by legal authorities.

## Artificial Intelligence: Boon or Bane

Artificial intelligence focuses on the data based approach pattern recognition, image recognition and speech recognition.

Human intelligence has made a machine to think critically and assist humans to take all the important decisions. The machines use algorithms to get the best match results on the basis of data which is entered by an input to the machine.

AI technology is helping a lot in human lives for making the life better, but a small mistake can lead to a negative result and potentially create problems.

Let's see some pros and cons of AI

### Pros:

- AI machine doesn't get tired.
- The machine can take rational decisions.
- Artificial intelligence can be used in healthcare, security guama education, entertainment, transport.
- AI gives accurate and fast results.

### Cons:

- AI technology is costly.
- AI machine lacks in creativity and emotions.
- It's privacy.
- Legal Malpractice.

**Artificial intelligence privacy is defined as**

**"One's ability to control the digital data in terms of how it is stored, modified and exchange between different parties."**

## Quick Look

- Principles related to good manners, good behavior is known as ethics.
- AI ethics refers to the basic principles of AI system design that use the good code of conduct and produces the results.
- Robo rights is the concept that people must have some moral obligations towards the machine.
- With advanced AI algorithms, such fears about these agencies being able to make an impact on our lives, is increasing.
- Artificial intelligence focuses on the data based approach pattern recognition, image recognition and speech recognition.

# Brain Booster
## Section - I

▶ Objective Type Questions

### A. Fill in the blanks with the correct words.

| Scientific research | Google Creative lab | AI | Human lives | System design |

1. AI ethics refers to the basic principle of _____.
2. Ethics plays a major role in _____ stem cells research, cloning and genetically modified food.
3. AI technology is helping a lot in _____ for making the life better.
4. _____ can track and monitor personal and non-personal data.
5. Infinite drum machine is built by the _____.

### B. Write T for the true statement and F for the false one:

1. Ethics plays a major role in nuclear technology.

2. AI does not give accurate and fast results.

3. AI technology is not helping human lives for making the life better.

4. AI can track and monitor personal and non-personal data.

5. Robot rights is not similar to human rights or animal rights.

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C. Choose the right option:

1. Which of the following is not the pros of AI?

   a) AI machine doesn't get tired    b) AI technology is costly

   c) AI gives accurate results    d) AI gives fast result

2. Which of the following is not considered as good AI policy?

   a) Data hacking    b) Transparent system

   c) Design    d) Data deletion

3. Which type of permission is not required while installing an app?

   a) Contacts    b) Storage

   c) Locations    d) Bank details

4. Ethics plays a major role in:

   a) Cloning    b) Both a and c

   c) Nuclear technology    d) Threatening

5. Ethics is a branch of philosophy that involves:

   a) Systematizing    b) Defending

   c) Recommending    d) All of the above

D. Application Based questions:

1. For this activity, open the smart phone of someone in your family. (**Take permission from them first!**). List out all the apps on the phone in the table. Identify the privacy concern associated with each of these apps. Write "No Concern", if you think that app does not have any privacy concern do not use apps mentioned in the first part of this section.

| APP NAME | PRIVACY CONCERN |
|---|---|
| 1. _____ | _____ |
| 2. _____ | _____ |

# Section - II

▶ Descripctive Type Questions

E. Answer the following question.
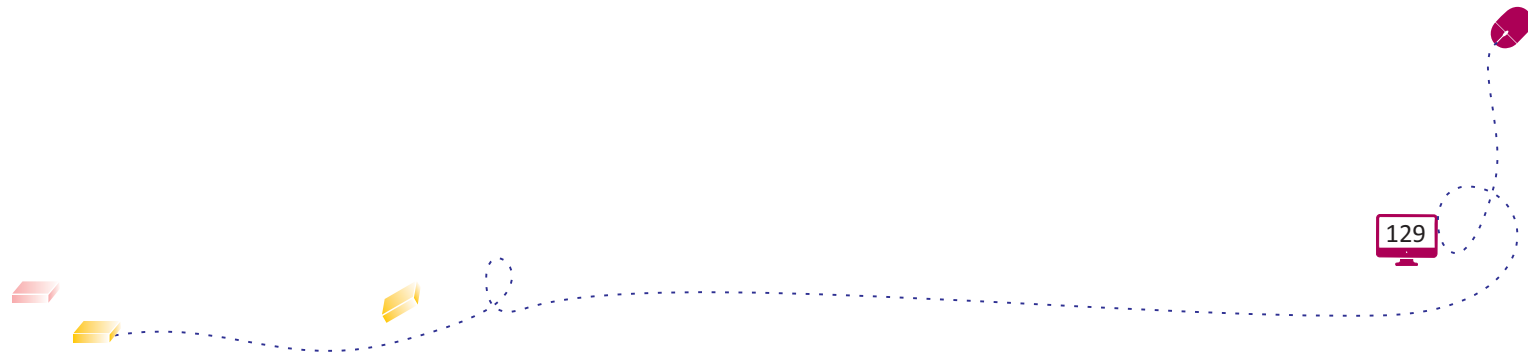
1. What do you understand by the term AI Ethics?

   _____

   _____

2. What are the components of a good AI policy?

_____

_____

3. Write down the pros and cons of AI?

_____

_____

4. What are the permissions required while installing an app?

_____

_____

_____

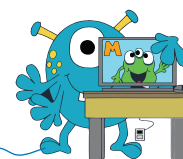5. Write down the steps for the activity of Infinite drum machine?

_____

_____

_____

## LAB ACTIVITY

*Practice Makes Perfect*

### Activity: Auto Draw

**Step 1:** This experiment is based on domain of AI. It identifies the patterns that you draw and suggest the related images.

**Step 2:** To do this activity, visit the following link on any computing device with the Speakers and Internet.

**Step 3:** https://www.autodraw.com

**Step 4:** Click on Start Drawing button .

**Step 5:** Select Auto Draw tool from the toolbar at the left side and draw an object. Suppose you want to draw a star. The experiment displays the suggestion according to your drawn object at the top of the screen. The AI technology used in this experiment will give you the suggestion.

**Step 6:** Select appropriate object from the suggestion the selected object will be drawn.

## PROJECT WORK

*For Practicing Ideas*

- You have heard that the development in the field of Artificial Intelligence will always create ethical issues. Do you agree? Write an Essay.

## GROUP DISCUSSION

*For Better Clarity*

Divide the class in two groups and discuss them the following topics:

- **Pros and Cons of Artificial Intelligence.**
- **Difference between Robo Ethics and AI Ethics.**

## ONLINE LINKS

*For Searching More*

- https://experiments.withgoogle.com/ai/ai//
- https://teachablemachine.withgoogle.com/
- https://www.unesco.org/en/artificial-intelligence/recommendation-ethics