Quiz

Graded: AI Issues, Ethics and Bias

1. Ethics in artificial intelligence is:

1 / 1 point

- ⦿ Something that we need to apply today.
- ◯ Something that is entirely solved in current AI systems.
- ◯ Something that somebody else is going to do in the future.
- ◯ Something that is not an issue.

> ✓ **Correct**
> Ethics in artificial intelligence is not something that somebody else is going to do in the future, it's something we need to apply today.

2. One approach that helps developers avoid unintentionally creating bias in AI systems is:

1 / 1 point

- ⦿ Using a wide variety of appropriately diverse data for training.
- ◯ Using highly specific training data from a narrow range.
- ◯ Not using any training data.
- ◯ None of the above.

> ✓ **Correct**
> Using a wide variety of appropriately diverse data for training helps to avoid bias in AI systems.

3. Which of the following statements about IBM's views on AI are correct?   **1 / 1 point**

○ Data and insights belong to the people and businesses who created them. Organizations that collect, store, manage, or process data have an obligation to handle it responsibly.

○ Knowing how an AI system arrives at an outcome is key to trust. To improve transparency, we should define how we build, deploy, and manage AI systems through scientific research.

○ Unbiased models and a spirit of diversity and inclusion are necessary to create fair AI systems, which can mitigate, rather than magnify, our existing prejudices.

○ AI can be applied to solve some of humanity's most pervasive problems and create opportunity for all.

◉ All of the above.

> ✓ **Correct**
>
> IBM believes that:
>
> - Data and insights belong to the people and businesses who created them. Organizations that collect, store, manage, or process data have an obligation to handle it responsibly.
>
> - Knowing how an AI system arrives at an outcome is key to trust. To improve transparency, we should define how we build, deploy, and manage AI systems through scientific research.
>
> - Unbiased models and a spirit of diversity and inclusion are necessary to create fair AI systems, which can mitigate, rather than magnify, our existing prejudices.
>
> - AI can be applied to solve some of humanity's most pervasive problems and create opportunity for all.

4. Which of the following are examples of bias in an AI system?   **1 / 1 point**

○ Facial recognition systems performing well for individuals of all skin tones.

◉ Image recognition systems associating images of kitchens, shops, and laundry with women rather than men.

○ AI systems in call centers providing context sensitive assistance to staff.

○ Customers not being aware that they are interacting with a chatbot on a company website.

> ✓ **Correct**
> One example of bias in an AI system is an image recognition system associating images of kitchens, shops, and laundry with women rather than men.

5. There is concern that some jobs will be replaced by AI systems. Which of the following characteristics make a job a good candidate for replacement? **1 / 1 point**

- ○ Features highly creative tasks.
- ○ Requires innovative problem solving.
- ◉ Rules-based decision-making.
- ○ Has very varied, unpredictable tasks.

✓ **Correct**
Jobs which feature decision-making based on a set of defined rules are good candidates for being replaced by AI systems.

6. Ethical concerns with AI systems are: **1 / 1 point**

- ○ Short term and easily addressed when developing new AI systems.
- ◉ Something that should be the concern of every AI developer, so they can be mitigated for as AI systems are developed.
- ○ Not genuinely troubling, and the concern of very few AI experts.
- ○ Something that can't be mitigated for.

✓ **Correct**
Every developer should have an awareness of the ethical concerns surrounding AI, so that they can mitigate against them.

7. What are some of the ethical concerns around artificial intelligence? **1 / 1 point**

A. Racial, gender or other types of bias.

B. Loss of jobs due to AI replacing workers performing repetitive tasks.

C. Concern about the trustworthiness of decision-making supported by AI systems.

D. Privacy, for example, as human faces are photographed and recognized in public spaces.

- ○ Only options A, B, and D are correct
- ○ Only options A and B are correct
- ○ None of the options are correct
- ◉ All of the options are correct

✓ **Correct**

8. Which of the following **NOT** a way AI is being used to benefit humanity?

   ○ In healthcare, AI is being used to interpret scans for early detection of cancer, eye disease, and other problems.

   ◉ Crime: to identify criminals before they commit a crime.

   ○ In healthcare, AI is being used to predict where the next outbreak of a disease will occur.

   ○ In agriculture, AI is being used to identify and recommend treatment for plant diseases.

   ✓ **Correct**
   AI is not being used to identify criminals before they commit a crime. It is being used in crime fighting to identify, locate, and alert authorities to the sounds of gunshots.

9. How many new opportunities and job roles does the World Economic Forum expect that AI will create in the next few years?

   ◉ 133 million

   ○ 7 million

   ○ 48 million

   ○ 165 million

   ✓ **Correct**
   The World Economic Forum expects that 133 million jobs will be generated by AI in the next few years.

10. What is a significant way in which developers of AI systems can guard against introducing bias?

   ○ Using only examples from their own environment as training data.

   ○ Using less varied AI systems and datasets.

   ◉ Providing effective training data and performing regular tests and audits.

   ○ Using government approved algorithms.

   ✓ **Correct**
   Providing effective data for training and performing regular tests and audits helps to ensure that the system is performing as expected.