

Exam : AIGP

Title:Artificial IntelligenceGovernance Professional

Version : DEMO

1.Machine learning is best described as a type of algorithm by which?

- A. Systems can mimic human intelligence with the goal of replacing humans.
- B. Systems can automatically improve from experience through predictive patterns.
- C. Statistical inferences are drawn from a sample with the goal of predicting human intelligence.

D. Previously unknown properties are discovered in data and used to predict and make improvements in the data.

Answer: B

Explanation:

Machine learning (ML) is a subset of artificial intelligence (AI) where systems use data to learn and improve over time without being explicitly programmed. Option B accurately describes machine learning by stating that systems can automatically improve from experience through predictive patterns. This aligns with the fundamental concept of ML where algorithms analyze data, recognize patterns, and make decisions with minimal human intervention.

Reference: AIGP BODY OF KNOWLEDGE, which covers the basics of AI and machine learning concepts.

2.You asked a generative AI tool to recommend new restaurants to explore in Boston, Massachusetts that have a specialty Italian dish made in a traditional fashion without spinach and wine. The generative AI tool recommended five restaurants for you to visit.

After looking up the restaurants, you discovered one restaurant did not exist and two others did not have the dish.

This information provided by the generative AI tool is an example of what is commonly called?

- A. Prompt injection.
- B. Model collapse.
- C. Hallucination.
- D. Overfitting.

Answer: C

Explanation:

In the context of AI, particularly generative models, "hallucination" refers to the generation of outputs that are not based on the training data and are factually incorrect or non-existent. The scenario described involves the generative AI tool providing incorrect and non-existent information about restaurants, which fits the definition of hallucination.

Reference: AIGP BODY OF KNOWLEDGE and various AI literature discussing the limitations and challenges of generative AI models.

3.Each of the following actors are typically engaged in the AI development life cycle EXCEPT?

- A. Data architects.
- B. Government regulators.
- C. Socio-cultural and technical experts.
- D. Legal and privacy governance experts.

Answer: B

Explanation:

Typically, actors involved in the AI development life cycle include data architects (who design the data frameworks), socio-cultural and technical experts (who ensure the AI system is socio-culturally aware

and technically sound), and legal and privacy governance experts (who handle the legal and privacy aspects). Government regulators, while important, are not directly engaged in the development process but rather oversee and regulate the industry.

Reference: AIGP BODY OF KNOWLEDGE and AI development frameworks.

4.A company is working to develop a self-driving car that can independently decide the appropriate route to take the driver after the driver provides an address.

If they want to make this self-driving car "strong" Al, as opposed to "weak," the engineers would also need to ensure?

A. That the AI has full human cognitive abilities that can independently decide where to take the driver.

B. That they have obtained appropriate intellectual property (IP) licenses to use data for training the AI.

D. That the AI has strong cybersecurity to prevent malicious actors from taking control of the car.

D. That the AI can differentiate among ethnic backgrounds of pedestrians.

Answer: A

Explanation:

Strong AI, also known as artificial general intelligence (AGI), refers to AI that possesses the ability to understand, learn, and apply intelligence across a broad range of tasks, similar to human cognitive abilities. For the self-driving car to be classified as "strong" AI, it would need to possess full human cognitive abilities to make independent decisions beyond pre-programmed instructions. Reference: AIGP BODY OF KNOWLEDGE and AI classifications.

5. Which of the following is NOT a common type of machine learning?

- A. Deep learning.
- B. Cognitive learning.
- C. Unsupervised learning.
- D. Reinforcement learning.

Answer: B

Explanation:

The common types of machine learning include supervised learning, unsupervised learning, reinforcement learning, and deep learning. Cognitive learning is not a type of machine learning; rather, it is a term often associated with the broader field of cognitive science and psychology. Reference: AIGP BODY OF KNOWLEDGE and standard AI/ML literature.