Practice Exam - Answers

Question 1 of 40

A bank uses AI models for detecting fraudulent transactions. While the bank's models are highly effective at identifying potential fraud, the risk management team is concerned about the inscrutability of the models. Which of the following statements correctly describes inscrutability in AI models?

A. Inscrutability is the inability to understand the internal mechanisms of a model. ✓

B. Inscrutability is the inability to determine the accuracy of a model's prediction.

C. Inscrutability is the inability to explain a model's predictions.

D. Inscrutability is the inability to generalize a model to out-of-sample data.

Correct Answer: A

Explanation:

A is correct. Inscrutability refers to the inability to understand the innerworkings of a model.

B is incorrect. An inability to determine the accuracy is not inscrutability.

C is incorrect. Inscrutability is not explainability.

D is incorrect. An inability to generalize is not inscrutability.

Learning objective(s): Discuss risks associated with inscrutability in AI and ML.

Reference: Module 1

Question 2 of 40

In March 1997, Deep Blue, an AI model developed by IBM, defeated the World Chess Champion Garry Kasparov. This event was considered a success for classical AI (also known as Good Old-Fashioned AI) development. Which of the following best describes a characteristic of classical AI?

A. Classical AI can optimize its performance by using the gradient descent method.

B. Classical AI cannot process structured data like time series data.

C. **Classical AI typically relies on pre-defined rules within simple contexts.** ✓

D. Classical AI can easily scale to large, complex problems.

Correct Answer: C

Explanation:

A is incorrect. Gradient descent is not used in classical AI.

B is incorrect. Classical AI works well in case of simple time series which follow pre-defined rules.

C is correct. Classical AI works best in simple contexts with pre-defined rules.

D is incorrect. When classical AI is applied to large, complex problems, it will result in combinatorial explosion.

Learning Objective: Discuss key breakthroughs leading to advances in AI and ML.

Reference: Module 1

Question 3 of 40

Which of the following best describes a societal risk scenario regarding the impact of AI?

A. AI systems employed by a mid-size trading company makes errors resulting in losses for clients.

B. **AI systems employed by a large social media company spread misinformation that influences public opinion.** ✓

C. AI systems used by a local manufacturer for hiring result in poor hiring decisions.

D. AI systems used by a local hospital access personal information resulting in a loss of privacy.

Correct Answer: B

Explanation:

A is incorrect. The trading losses are a concern for the trading company and its clients, but it is not a societal risk.

B is correct. AI systems can be used to spread misinformation and mislead public opinion, which is a societal risk.

C is incorrect. Unfair hiring practices from AI systems is an organizational risk rather than societal risk.

D is incorrect. The loss of privacy from the tracking of personal data is limited to the hospital's patients, which is not a societal risk.

Learning Objective: Discuss ways in which AI exposes individuals, organizations, and society to risk.

Reference: Module 1