<u>Course</u> <u>Progress</u>

<u>ess</u> <u>Dates</u>

Discussion

<u>Wiki</u>

★ Course / Module 2 - Al Concepts, Terminology, and Application Areasl / Module 2 - Graded Quiz

| | | Next |
|--|--|--------|
| aded Qu Bookmark this | iz - Module 2 page | |
| | ar 1, 2021 09:12 IST Completed Question 1 | |
| 1/1 point (g | | |
| Cogn | itive systems can derive mathematically precise answers following a rigid decision tre each | ee |
| Cogn | itive systems can only process neatly organized structured data | |
| | itive systems can only translate small volumes of audio data into their literal text lations at massive speeds | |
| trairs | | |
| Cogn Answer Correct: | itive systems can learn from their successes and failures | |
| Cogn Answer Correct: Cognitive | itive systems can learn from their successes and failures systems learn, adapt, and keep getting smarter by learning from their interactions witheir own successes and failures, just like humans do. You have used 2 of 2 attempts | ith us |
| Cogn Answer Correct: Cognitive and from Submit Graded 1/1 point (g | systems learn, adapt, and keep getting smarter by learning from their interactions witheir own successes and failures, just like humans do. You have used 2 of 2 attempts Question 2 raded) | th us |
| Answer Correct: Cognitive and from Submit Graded 1/1 point (g) Which of the | systems learn, adapt, and keep getting smarter by learning from their interactions witheir own successes and failures, just like humans do. You have used 2 of 2 attempts Question 2 | |
| Cogn Answer Correct: Cognitive and from Submit Graded 1/1 point (g Which of the often) Data | systems learn, adapt, and keep getting smarter by learning from their interactions we their own successes and failures, just like humans do. You have used 2 of 2 attempts Question 2 raded) these statements is true? cial Intelligence and Machine Learning refer to the same thing since both the terms a | re |
| Answer Correct: Cognitive and from Submit Graded 1/1 point (g) Which of the Often Data draw | systems learn, adapt, and keep getting smarter by learning from their interactions witheir own successes and failures, just like humans do. You have used 2 of 2 attempts Question 2 raded) These statements is true? Cial Intelligence and Machine Learning refer to the same thing since both the terms a used interchangeably Science is a subset of Al that uses machine learning algorithms to extract meaning allogorithms. | re |

Answer Correct:

Doon I parning anables machines to continuously learn on the ich and improve the quality and

accuracy of results by determining whether decisions were correct.

Submit

You have used 1 of 2 attempts

Graded Question 3

1/1 point (graded)

Which of the following is NOT an attribute of Machine Learning?

| Takes data and rules as input and uses these inputs to develop an algorithm that will give us an answer |
|---|
| |
| Machine Learning defines behavioral rules by comparing large data sets to find common patterns |
| |
| Machine Learning models can be continuously trained |
| |
| Takes data and answers as input and uses these inputs to create a set of rules that determine what the Machine Learning model will be |
| |



Answer

Correct:

Machine Learning algorithms are trained with large sets of datasets to determine the relationships between inputs and desired results to build the machine learning models.

Submit

You have used 1 of 2 attempts

Graded Question 4

1/1 point (graded)

Which of the following is NOT an attribute of Unsupervised Learning?

The algorithm ingests unlabeled data, draws inferences, and finds patterns from unstructured data

It is useful for clustering data, where data is grouped according to how similar it is to its neighbors and dissimilar to everything else

👝 Takes data and rules as input and uses these inputs to develop an algorithm that will give us an

It is useful for finding hidden patterns and or groupings in data and can be used to differentiate normal behavior with outliers such as fraudulent activity



Answer

Correct:

This statement is not an attribute of either Machine Learning or Unsupervised Learning. Machine Learning techniques such as unsupervised learning are not fed rules. Rather they determine the rules from data.

Submit

You have used 1 of 2 attempts

Graded Question 5

1/1 point (graded)

| which of the following is an attribute of Supervised Learning? | |
|---|---------------------|
| Relies on providing the machine learning algorithm with a set of rules and cons letting it learn how to achieve its goals | traints and |
| Relies on providing the machine learning algorithm human-labeled data - the m provide, the more precise the algorithm becomes in classifying new data | ore samples you |
| Relies on providing the machine learning algorithm unlabeled data and letting the qualities | he machine infer |
| Tries its best to maximize its rewards by trying different combinations of allowed within the provided constraints | ed actions |
| ✓ | |
| Answer Correct: Supervised learning relies on giving the algorithm human-labeled data for training. T number of samples that the algorithm is trained on, the greater is its precision in cla data. | • |
| Submit You have used 1 of 2 attempts | |
| Graded Question 6 | |
| /1 point (graded) | |
| hich of the following statements about datasets used in Machine Learning is NOT | true? |
| Validation data subset is used to validate results and fine-tune the algorithm's p | parameters |
| Training data is used to fine-tune algorithm's parameters and evaluate how goo | od the model is |
| | |
| Training subset is the data used to train the algorithm | |
| Testing data is data the model has never seen before and is used to evaluate ho model is | ow good the |
| ✓ | |
| Answer | |
| Correct: raining data is used to train the algorithm. It is the Validation data that is used to fi Igorithm's parameters and evaluate how good the model is. | ne-tune |
| Submit You have used 1 of 2 attempts | |
| Graded Question 7 | |
| /1 point (graded) | |
| When creating deep learning algorithms, developers configure the number of layers unctions that connect the outputs of each layer to the inputs of the next. | and the type of |
| True | |
| False | |
| ✓ | |
| answer | |

Answer Correct:

Deep Learning algorithms rely on several layers of processing units, or neurons, where each layer

passes on its output to the next layer, which processes it and passes it onto the next. The number of layers and the types of functions that connect the outputs of each layer to the inputs of the next are configured by developers.

Submit

You have used 1 of 1 attempt

Graded Question 8

1/1 point (graded)

Which of the following fields of application for AI can be used at the airport to flag weapons within luggage passing through the X-ray scanner?

| Natural Language |
|---|
| Computer Vision |
| Speech |
| Chatbots |
| Answer Correct: Computer Vision enables machines to interpret digital images and video sequences and perform tasks like object identification. Submit You have used 1 of 2 attempts |
| Graded Question 9 1/1 point (graded) Which of these activities is NOT required in order for a neural network to synthesize human voice? |
| Generate audio data and run it through the network to see if it validates it as belonging to the subject |
| Deconstruct sentences to decipher the context of use |
| Continue to correct the sample and run it through the classifier, repetitively, till an accurate voice sample is created |
| Ingest numerous samples of a person's voice until it can tell whether a new voice sample belongs to the same person |
| |

Answer

Correct:

Deconstructing sentences to decipher the context of use is a feature of Natural Language Processing, not Speech Synthesis.

Submit

You have used 2 of 2 attempts

Graded Question 10

1/1 point (graded)

Which one of these ways is NOT how Al learns?

| Troillioreci | nent Learning | | |
|---------------------------|--------------------------------|--|-------------------|
| Supervised | d Learning | | |
| Proactive I | Learning | | |
| Ounsupervi | sed Learning | | |
| <u> </u> | | | |
| Answer Correct: Al lea | rns in three different ways | s - Supervised, Unsupervised, and Reinfo | rcement Learning |
| zorrect. Ariedi | The first times different ways | o Supervised, erisupervised, and itemite | reement Learning. |
| | | | |
| Submit Yo | ii have iised 1 of 2 attemnts | | |

© All Rights Reserved



edX

<u>About</u>

Affiliates

edX for Business

Open edX

<u>Careers</u>

News

Legal

Terms of Service & Honor Code

Privacy Policy

Accessibility Policy

Trademark Policy

<u>Sitemap</u>

Connect

Blog

Contact Us

Help Center

Media Kit

Donate













