Week 1 Quiz

1.
Question 1

Which of these terms best describes the type of AI used in today's email spam filters, speech recognition, and other specific applications?

1 / 1 point

○

Artificial General Intelligence (AGI)

⦿

Artificial Narrow Intelligence (ANI)

Correct

2.
Question 2

What do you call the commonly used AI technology for learning input (A) to output (B) mappings?

1 / 1 point

○

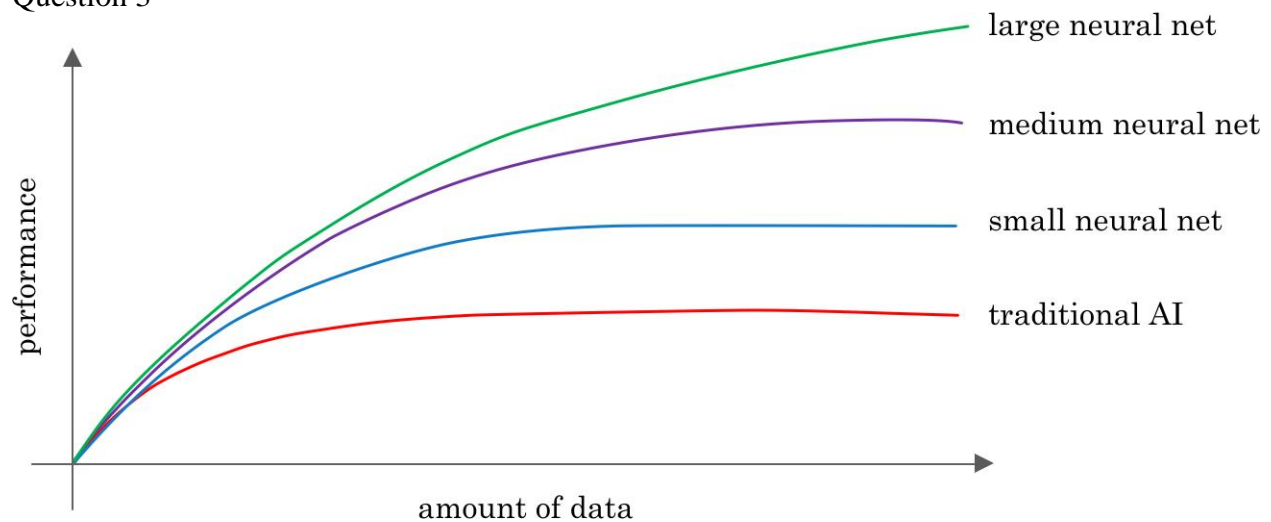Artificial General Intelligence

⦿

Supervised learning

○

Reinforcement learning

○

Unsupervised learning

Correct

3.
Question 3

You want to use supervised learning to build a speech recognition system. The figure above suggests that in order for a neural network (deep learning) to achieve the best performance, you would ideally use: (Select all that apply)

1 / 1 point
☑

A large dataset (of audio files and the corresponding text transcript)

Correct
☐

A small dataset (of audio files and the corresponding text transcript)

☑

A large neural network

Correct
☐

A small neural network

4.
Question 4

The only way to acquire data for a supervised learning algorithm is to manually label it. I.e., given the input A, to ask a human to provide B.

O

True

⦿

False

Correct
5.
Question 5

Which of these statements regarding data acquisition do you agree with?

O

Only structured data is valuable; AI cannot process unstructured data.

O

It doesn't matter how data is acquired. The more data, the better.

O

It doesn't help to give data to an AI team, because they can always produce whatever they need by themselves.

⦿

Some types of data are more valuable than others; working with an AI team can help you figure out what data to acquire.

Correct
6.
Question 6

You run a company that manufactures scooters. Which of the following are examples of unstructured data? (Select all that apply.)

☑

Pictures of your scooters

Correct
☐

Audio files of the engine sound of your scooters

☐

The number of scooters sold per week over the past year

☐

The maximum speed of each of your scooters

You didn't select all the correct answers
7.
Question 7

Suppose you run a website that sells cat food. Which of these might be a good result from a Data Science project? (Select all that apply.)

0.75 / 1 point
☐

A neural network that closely mimics how cats' brains work.

☑

A slide deck presenting a plan on how to modify pricing in order to improve sales.

Correct
☑

Insights into how to market cat food more effectively, depending on the breed of cat.

Correct
☑

A large dataset of images labeled as "Cat" and "Not Cat"

This should not be selected
8.
Question 8

Based on the terminology defined in Video 4, which of the following statements do you agree with? (Select all that apply.)

0.5 / 1 point

☑

AI is a type of deep learning. (I.e., all AI algorithms are deep learning algorithms.)

This should not be selected

☐

The terms "Machine learning" and "data science" are used almost interchangeably.

☐

The terms "Deep learning" and "neural network" are used almost interchangeably.

☑

Deep learning is a type of machine learning. (I.e., all deep learning algorithms are machine learning algorithms.)

Correct
9.
Question 9

Which of these do AI companies do well?

1 / 1 point

◯

Strategic data acquisition

◯

Invest in unified data warehouses

◯

Spot automation opportunities

◉

All of the above

Correct

10.

Question 10

Say you want to input a picture of a person's face (A), and output whether or not they are smiling (B). Because this is a task that most humans can do in less than 1 second, supervised learning can probably learn this A-to-B mapping.

0 / 1 point

○

True

◉

False

Incorrect