

## Week 1 Quiz

LATEST SUBMISSION GRADE

100%

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

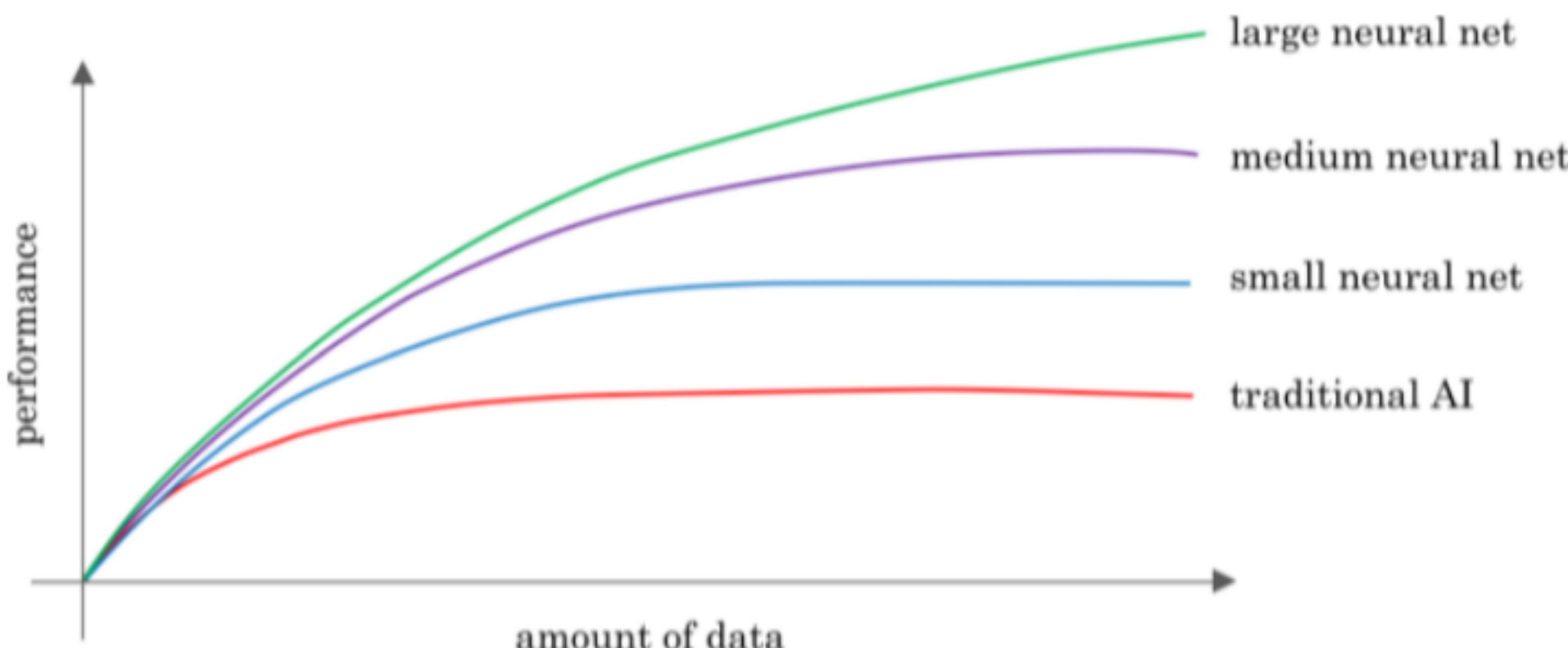
2. What do you call the commonly used AI technology for learning input (A) to output (B) mappings?

1 / 1 point

- ☒ Supervised learning
- ☐ Artificial General Intelligence
- ☐ Reinforcement learning
- ☐ Unsupervised learning

✔ Correct

3.



1 / 1 point

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)

- ☒ 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. 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.

1 / 1 point

- ☐ True
- ☒ False

✔ Correct

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

1 / 1 point

- ☐ It doesn't matter how data is acquired. The more data, the better.
- ☐ 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.
- ☐ Only structured data is valuable; AI cannot process unstructured data.

✔ Correct

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

1 / 1 point

- ☐ The maximum speed of each of your scooters
- ☒ Audio files of the engine sound of your scooters

✔ Correct

- ☐ The number of scooters sold per week over the past year
- ☒ Pictures of your scooters

✔ Correct

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.)

1 / 1 point

- ☒ 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"
- ☐ 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

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

1 / 1 point

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

✔ Correct

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

✔ Correct

- ☐ The terms "Machine learning" and "data science" are used almost interchangeably.
- ☐ AI is a type of deep learning. (I.e., all AI algorithms are deep learning algorithms.)

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. 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.

1 / 1 point

- ☒ True
- ☐ False

✔ Correct