Congratulations! You passed!

Grade received 100% **Latest Submission Grade** 100% **To pass** 80% or higher

Go to next item

1. Which of the following are some aspects in which AI has transformed business? **1 / 1 point**

- (•) Web searching and advertisement.
- ( ) AI has not been able to transform businesses.
- ( ) Eliminating the need for health care services.
- ( ) Creating an AI-powered society.

Expand

Correct
Yes. AI has helped to make a fit between services or results and consumers or queries.

2. Which of the following play a major role to achieve a very high level of performance with Deep Learning algorithms? **1 / 1 point**

- [x] Large amounts of data.

Correct
Yes. Some of the most successful Deep Learning algorithms make use of very large datasets for training.

- [x] Deep learning has resulted in significant improvements in important applications such as online advertising, speech recognition, and image recognition.

Correct
These were all examples discussed in lecture 3.

- [ ] Smaller models.
- [x] Large models.

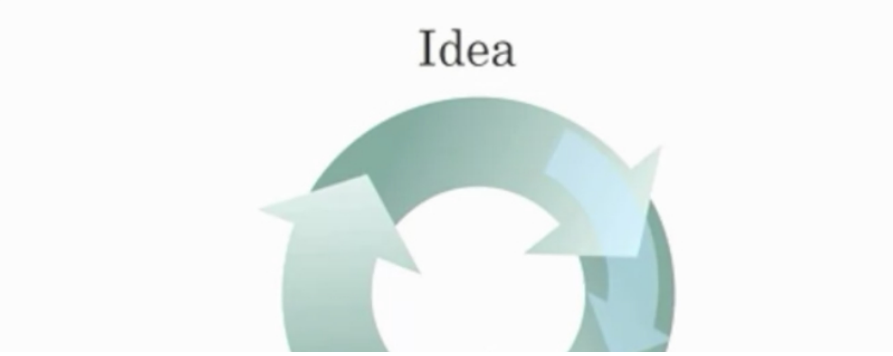
Correct
Yes. In most cases it is necessary for a very large neural network to make use of all the available data.

- [ ] Better designed features to use.

Expand

Correct
Great, you got all the right answers.

3. Recall the diagram of iterating over different ML ideas. Which of the stages shown in the diagram was improved with the use of a better GPU/CPU? **1 / 1 point**



- [ ] With larger datasets, the iteration process is faster.
- [ ] Without better hardware, there is no way to train models faster.
- [x] Experiments finish faster, producing better ideas through increased iteration tempo.

Correct
Yes. The experiments help to test ideas, by getting the feedback from the experiments new variations can be tested and the results might indicate new directions to explore.

- [x] Some algorithms are specifically designed to run experiments faster.

Correct
Yes. Some algorithms look specifically to improve the time needed to run an experiment and thus enable us to produce better models.

Expand

Correct
Great, you got all the right answers.

4. When building a neural network to predict housing price from features like size, the number of bedrooms, zip code, and wealth, it is necessary to come up with other features in between input and output like family size and school quality. True/False? **1 / 1 point**

- ( ) True
- (•) False

Expand

Correct
A neural network figures out by itself the "features" in between using the samples used to train it.

5. ReLU stands for which of the following? **1 / 1 point**

- (•) Rectified Linear Unit
- ( ) Recognition Linear Unit
- ( ) Rectified Last Unit
- ( ) Representation Linear Unit

Expand

Correct
Correct, ReLU stands for Rectified Linear Unit.

6. Which of the following are examples of unstructured data? Choose all that apply. **1 / 1 point**

- [x] Text describing size and number of pages of books.

✓ Correct
Yes, text documents are examples of "unstructured" data.

☑ Images for bird recognition.

✓ Correct
Yes, images are an example of "unstructured" data.

☐ Information about elephants' weight, height, age, and the number of offspring.

☑ Sound files for speech recognition.

✓ Correct
Yes, audio is an example of "unstructured" data.

Expand

✓ Correct
Great, you got all the right answers.

7. Which of the following are examples of structured data? Choose all that apply. **1 / 1 point**

☑ A dataset with zip code, income, and name of a person.

✓ Correct
Yes, this data can be presented in a table. This is an example of "structured" data.

☑ A dataset of weight, height, age, the sugar level in the blood, and arterial pressure.

✓ Correct
Yes, this data can be presented in a table. This is an example of "structured" data.

☐ A set of audio recordings of a person saying a single word.

☐ A dataset with short poems.

Expand

✓ Correct
Great, you got all the right answers.

8. RNNs (Recurrent Neural Networks) are good for data with a temporal component. True/False? **1 / 1 point**

◉ True

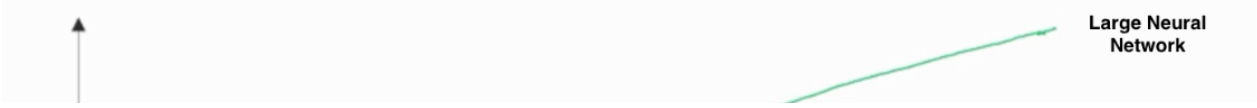
○ False

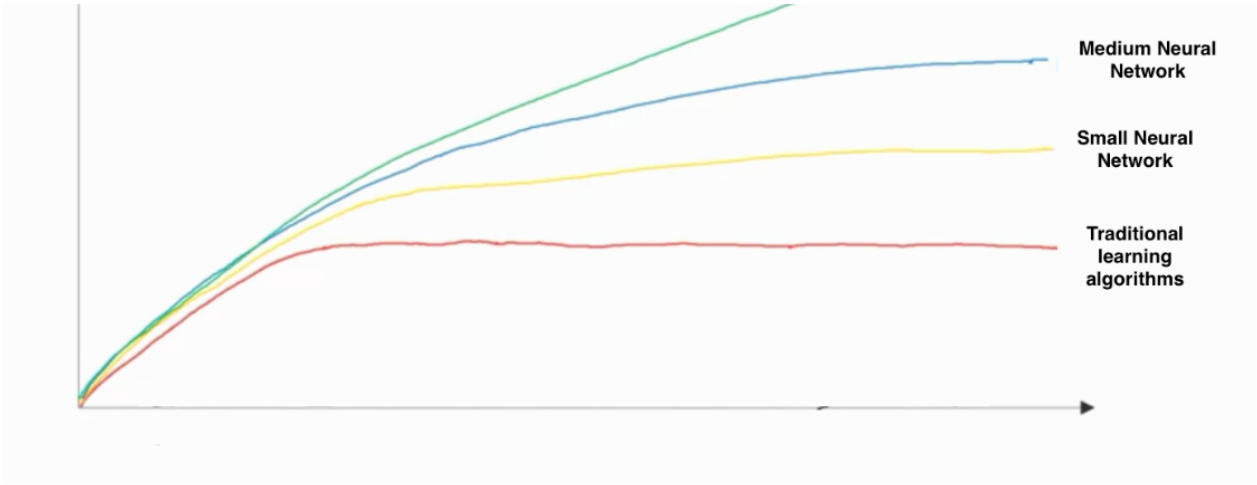
Expand

✓ Correct
Yes, RNN are designed to work with sequences; the elements of a sequence can be sorted by a temporal component.

9. **1 / 1 point**

In this diagram which we hand-drew in the lecture, what do the horizontal axis (x-axis) and vertical axis (y-axis) represent?



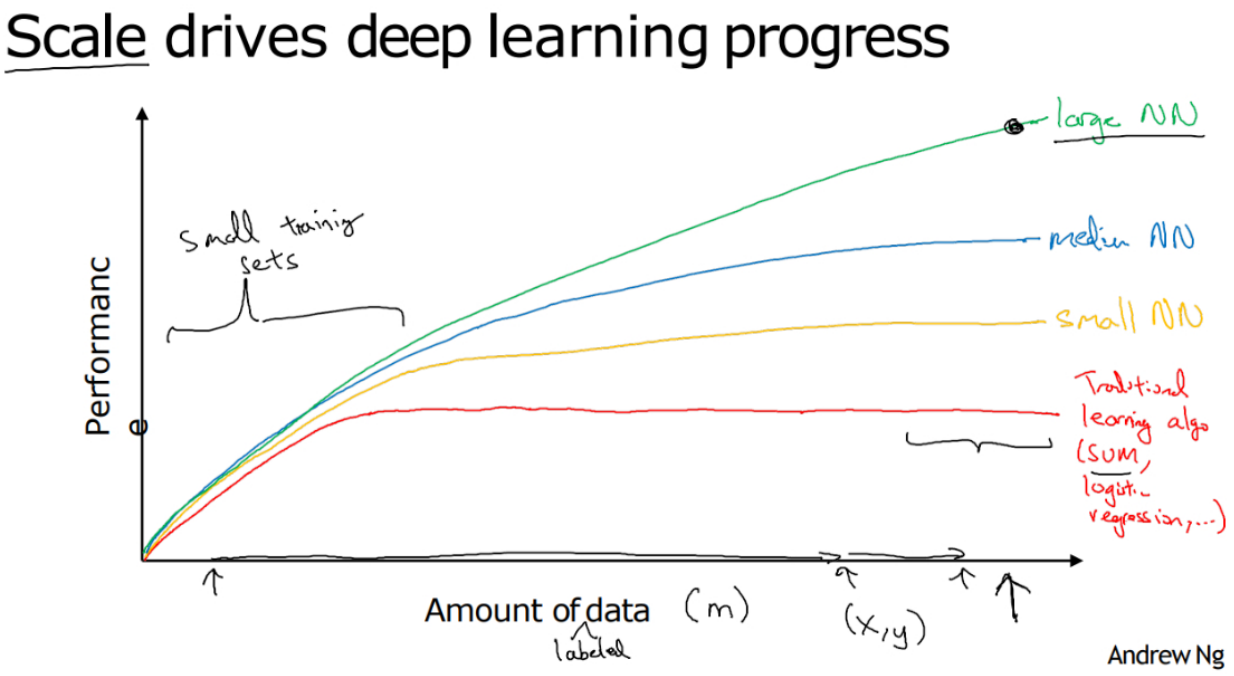


- x-axis is the amount of data
  - y-axis (vertical axis) is the performance of the algorithm.
- x-axis is the performance of the algorithm
  - y-axis (vertical axis) is the amount of data.
- x-axis is the amount of data
  - y-axis is the size of the model you train.
- x-axis is the input to the algorithm
  - y-axis is outputs.

Expand

Correct

10. Assuming the trends described in the figure are accurate. The performance of a NN depends only on the size of the NN. True/False? 1 / 1 point



- True

False

Expand

Correct

Yes. According to the trends in the figure above, It also depends on the amount of data.