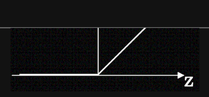
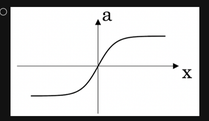




Correct
Correct! This is the sigmoid activation function; this function was changed for the ReLU activation function helping with the training of NN.

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

- [ ] Information about elephants' weight, height, age, and the number of offspring.
- [x] Sound files for speech recognition.

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

- [x] Images for bird recognition.

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

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

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

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

- [x] 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.
- [x] 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.

8. Why can an RNN (Recurrent Neural Network) be used to create English captions to French movies? Choose all that apply. 1 / 1 point

- [x] It can be trained as a supervised learning problem.

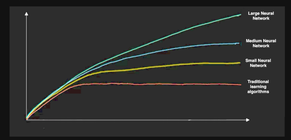
Correct
Yes, the data can be used as x (movie audio) to y (caption text).

- [x] The RNN is applicable since the input and output of the problem are sequences.

Correct
Yes, an RNN can map from a sequence of sounds (or audio files) to a sequence of words (the caption).

- [ ] RNNs are much more powerful than a Convolutional neural Network (CNN).
- [ ] The RNN requires a small number of examples.

9. In this diagram which we hand-drew in the lecture, what do the horizontal axis (x-axis) and vertical axis (y-axis) represent? 1 / 1 point



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

Correct

10. Assuming the trends described in the previous question's figure are accurate (and hoping you got the axis labels right), which of the following are true? (Check all that apply.) 1 / 1 point

- [ ] Decreasing the training set size generally does not hurt an algorithm's performance, and it may help significantly.
- [x] Increasing the training set size generally does not hurt an algorithm's performance, and it may help significantly.

Correct
Yes. Bringing more data to a model is almost always beneficial.

- [ ] Decreasing the size of a neural network generally does not hurt an algorithm's performance, and it may help significantly.
- [x] Increasing the size of a neural network generally does not hurt an algorithm's performance, and it may help significantly.

Correct
Yes. According to the trends in the figure above, big networks usually perform better than small networks.