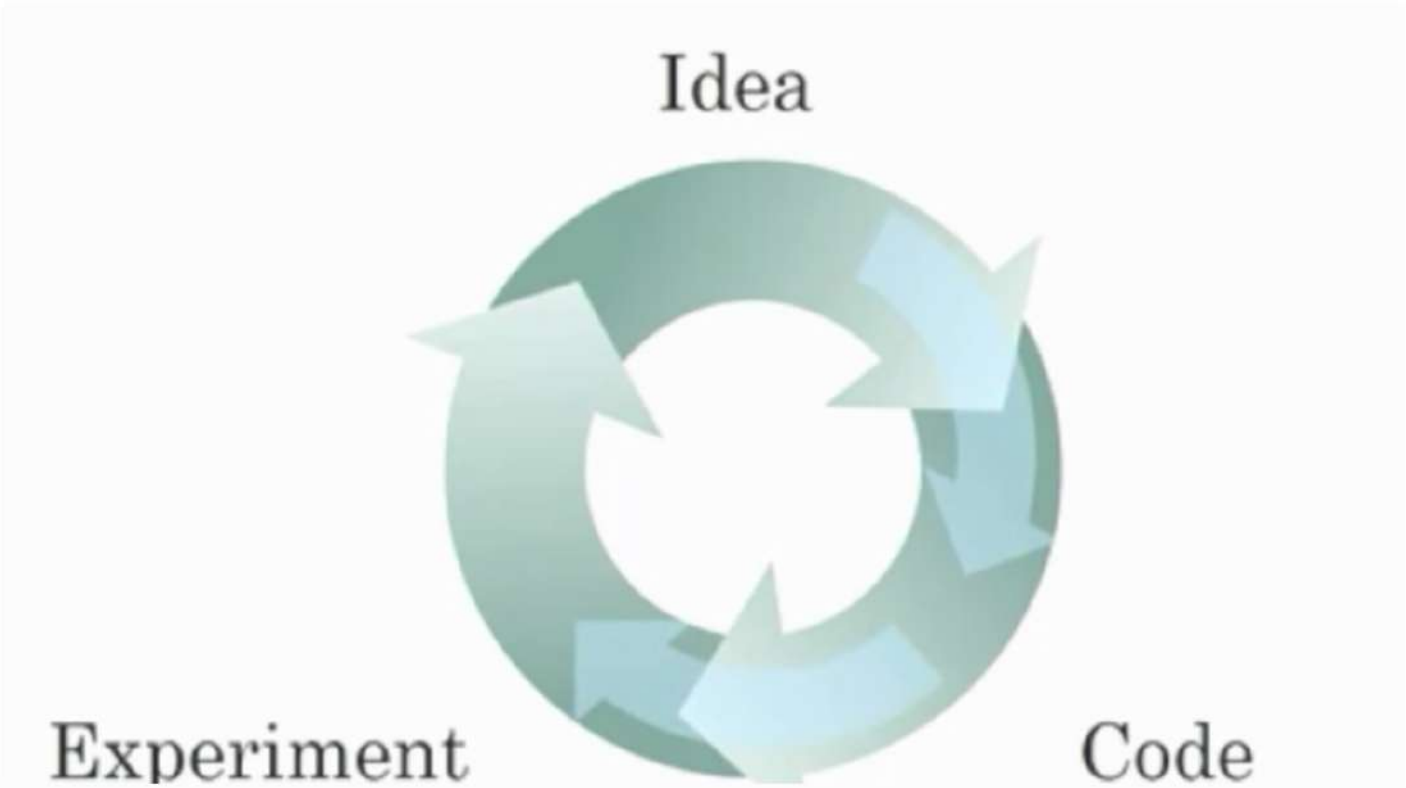
1. Which of the following are some aspects in which AI has transformed business? **1 point**

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

2. Which of the following are reasons that didn't allow Deep Learning to be developed during the '80s? **1 point**

- [x] Interesting applications such as image recognition require large amounts of data that were not available.
- [ ] Limited computational power.
- [ ] People were afraid of a machine rebellion.
- [ ] The theoretical tools didn't exist during the 80's.

3. Recall this diagram of iterating over different ML ideas. Which of the statements below are true? (Check all that apply.) 1 point



- [ ] Improvements in the GPU/CPU hardware enable the discovery of better Deep Learning algorithms.
- [x] Larger amounts of data allow researchers to try more ideas and then produce better algorithms in less time.
- [ ] Better algorithms allow engineers to get more data and then produce better Deep Learning models.
- [ ] Better algorithms can speed up the iterative process by reducing the necessary computation time.

4. When experienced deep learning engineers work on a new problem, they can usually use insight from previous problems to train a good model on the first try, without needing to iterate multiple times through different models. True/False? 1 point

- ○ True
- ◉ False

5. Which one of these plots represents a ReLU activation function? 1 point

- ○ Figure 2:

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Figure 2:

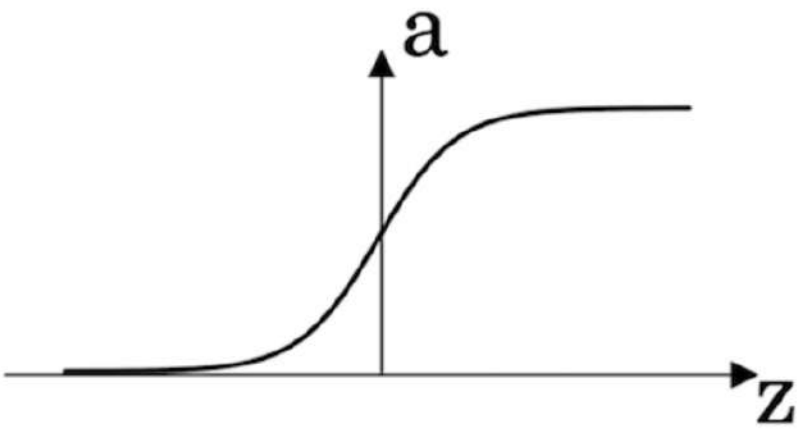

Figure 1:

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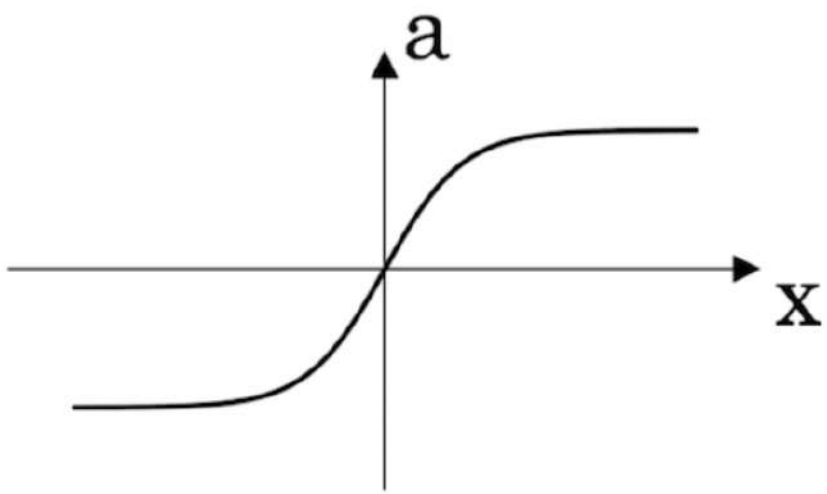

◉ Figure 3:

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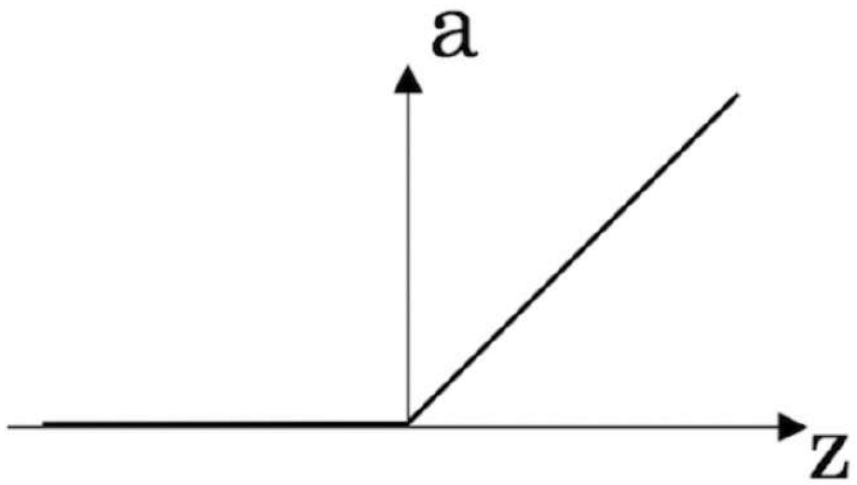
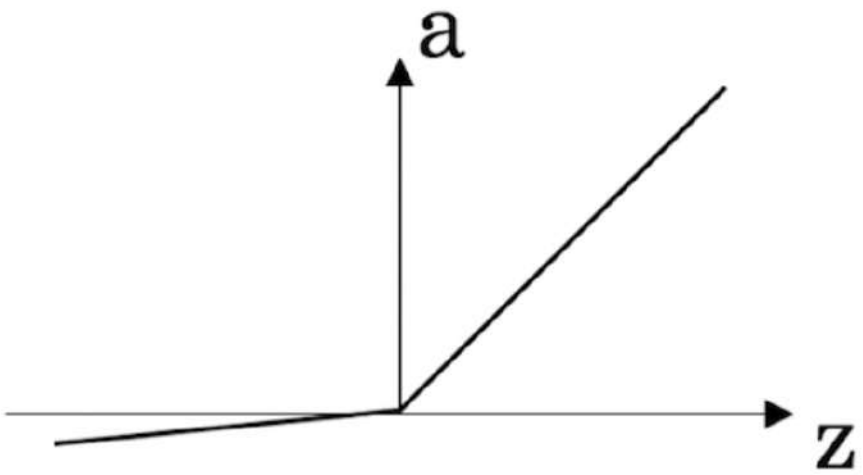


Figure 4:

○ Figure 4:



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- (●) False
- ( ) True

7. A dataset is composed of age and weight data for several people. This dataset is an example of "structured" data because it is represented as an array in a computer. True/False? 1 point

- ( ) False
- (●) True

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

- ( ) False
- (●) True

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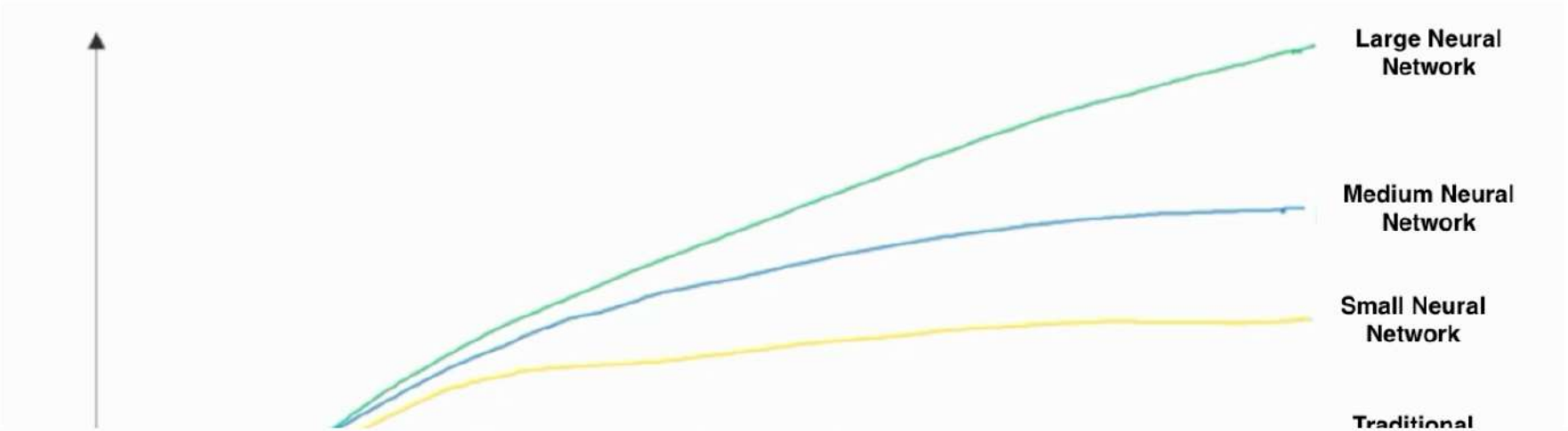
9. In this diagram which we hand-drew in the lecture, what do the horizontal axis (x-axis) and vertical axis (y-axis) represent? 1 point



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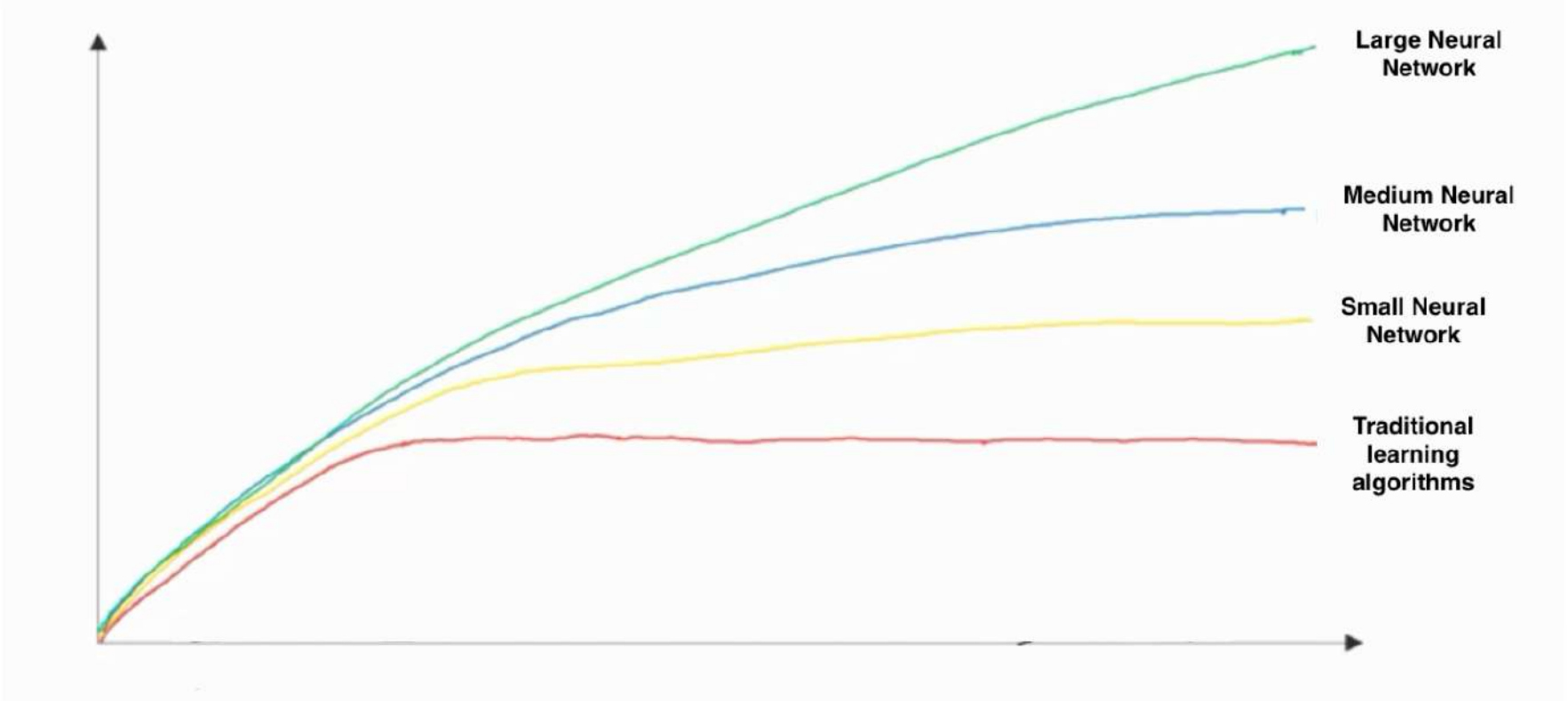

- x-axis is the performance of the algorithm
- y-axis (vertical axis) is the amount of data.

- 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.

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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 point

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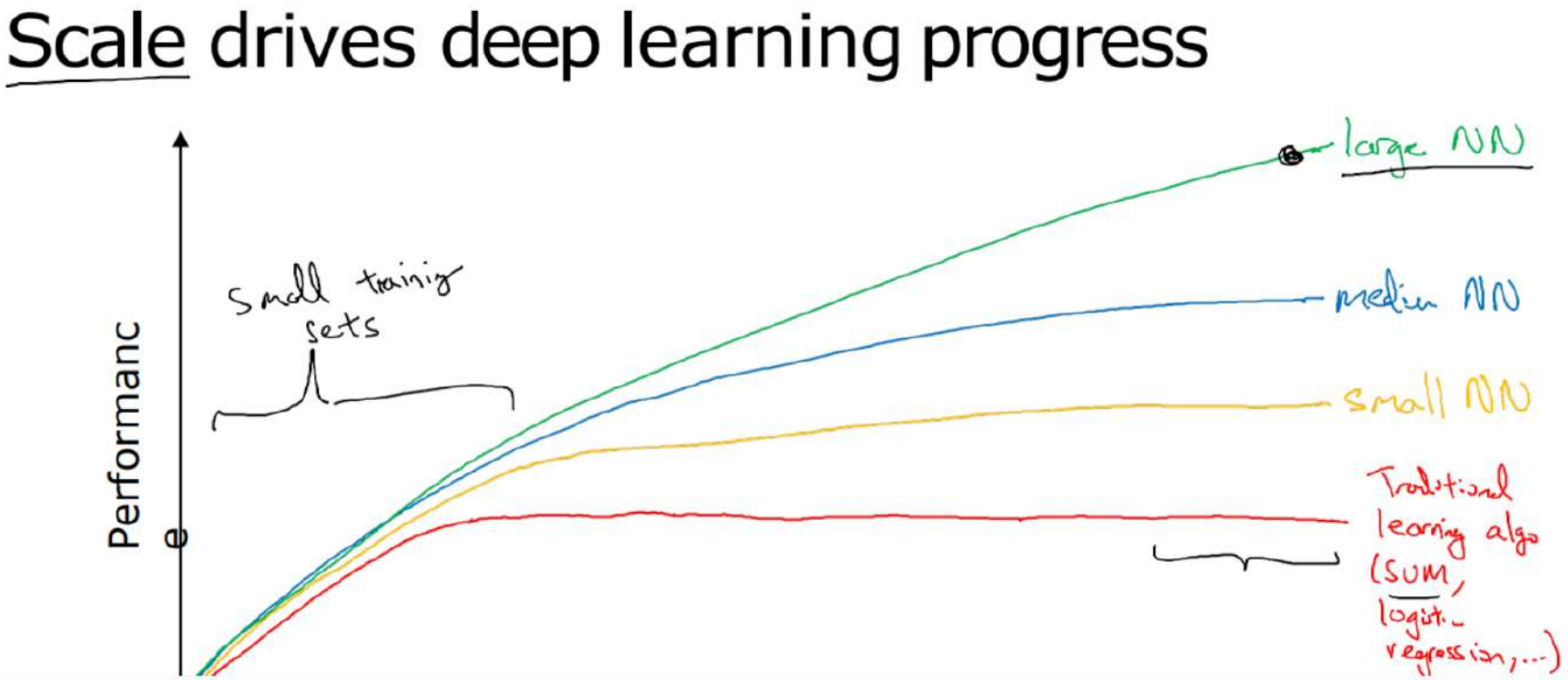

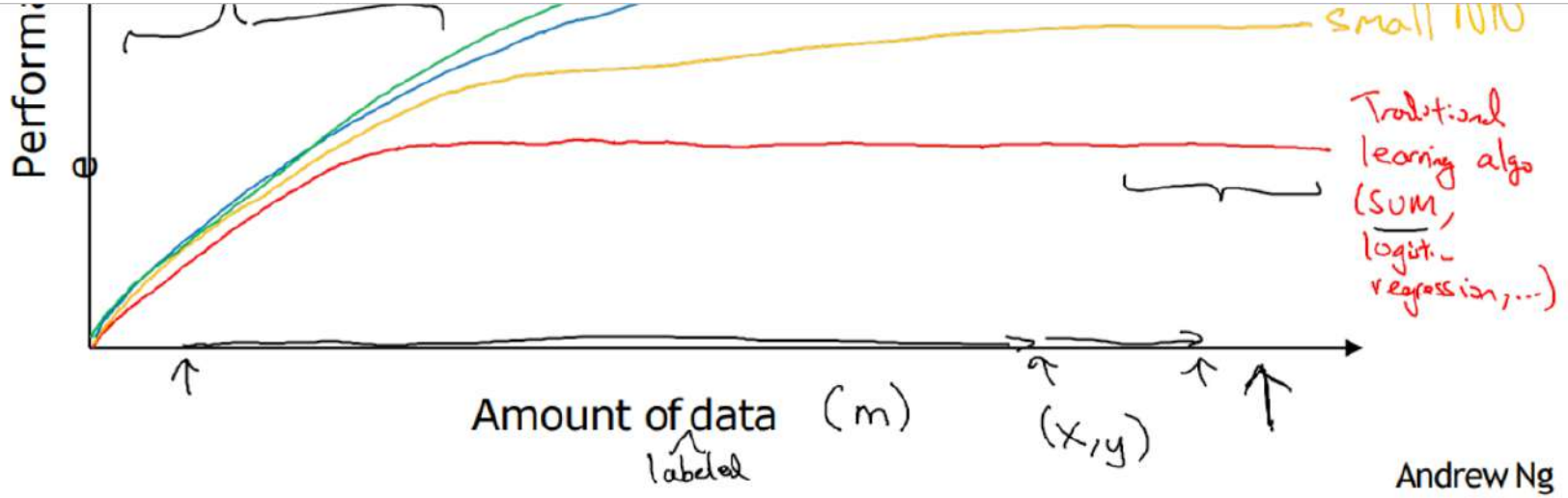
Performance
small NN
Traditional learning algo (SUM, logist. regression, ...)
Amount of data (m)
labeled
(x, y)
Andrew Ng

- (●) False
- ( ) True