Week 1 Quiz | Coursera

Web Clip

Week 1 Quiz
Graded Quiz • 30 min

Due Apr 11, 2:59 PM CST

Congratulations! You passed!

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

Week 1 Quiz

Latest Submission Grade 100%

1.
Question 1
What is the difference between traditional programming and Machine Learning?

1 / 1 point

- ○ Machine learning identifies complex activities such as golf, while traditional programming is better suited to simpler activities such as walking.
- ◉ In traditional programming, a programmer has to formulate or code rules manually, whereas, in Machine Learning, the algorithm automatically formulates the rules from the data.

Correct
Exactly! Machine learning algorithms build a model based on sample data, known as "training data", in order to make predictions or decisions without being explicitly programmed to do so.

2.
Question 2
What do we call the process of telling the computer what the data represents (i.e. this data is for walking, this data is for running)?

1 / 1 point

- ○ Programming the Data
- ○ Categorizing the Data
- ○ Learning the Data
- ◉ Labelling the Data

Correct
Yes! Labeling typically takes a set of unlabeled data and augments each piece of it with informative tags.

3.
Question 3
What is a Dense layer?

1 / 1 point

- ○ A single neuron
- ○ An amount of mass occupying a volume
- ○ A layer of disconnected neurons
- ◉ A layer of connected neurons

Correct
Correct! In Keras, dense is used to define a layer of connected neurons.

4.
Question 4
How do you measure how good the current ‘guess’ is?

1 / 1 point

- ◉ Using the Loss function
- ○ Training a neural network
- ○ Figuring out if you win or lose

Correct
Absolutely! An optimization problem seeks to minimize a loss function.

5.

Question 5

What does the optimizer do?

1 / 1 point

- (●) Generates a new and improved guess
- ( ) Decides to stop training a neural network
- ( ) Measures how good the current guess is
- ( ) Figures out how to efficiently compile your code

Correct

Nailed it! The optimizer figures out the next guess based on the loss function.

6.

Question 6

What is Convergence?

1 / 1 point

- ( ) A dramatic increase in loss
- ( ) A programming API for AI
- (●) The process of getting very close to the correct answer
- ( ) An analysis that corresponds too closely or exactly to a particular set of data.

Correct

That’s right! Convergence is when guesses get better and better closing to a 100% accuracy.

7.

Question 7

What does model.fit do?

1 / 1 point

- ( ) It makes a model fit available memory
- ( ) It optimizes an existing model
- (●) It trains the neural network to fit one set of values to another
- ( ) It determines if your activity is good for your body

Correct

Correct! The training takes place on the fit command.