Congratulations! You passed!

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

Go to next item

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. 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
- ◉ Labelling the Data
- ○ Learning the Data

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

3. What is a Dense layer? **1 / 1 point**

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

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

4. How do you measure how good the current 'guess' is? **1 / 1 point**

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

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

5. What does the optimizer do? **1 / 1 point**

- ○ Decides to stop training a neural network
- ◉ Generates a new and improved guess
- ○ 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. What is Convergence? **1 / 1 point**

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

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

7. What does model.fit do? **1 / 1 point**

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

Correct
Correct! The training takes place on the fit command.