

✔ **Congratulations! You passed!**

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

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Week 1 Quiz

Latest Submission Grade 100%

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

1 / 1 point

- ☒ 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.
- ☐ Machine learning identifies complex activities such as golf, while traditional programming is better suited to simpler activities such as walking.

✔ **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

- ☒ Labelling the Data
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 layer of disconnected neurons
- ☐ An amount of mass occupying a volume
- ☒ A layer of connected neurons
- ☐ A single neuron

✔ **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

- ☐ Figuring out if you win or lose

✔ **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

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

✔ **Correct**

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

5. What does the optimizer do?

1 / 1 point

- ☐ Measures how good the current guess is

6. Press enter to efficiently execute your code.



Correct

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

6. What is Convergence?

1 / 1 point



The process of getting very close to the correct answer



A dramatic increase in loss



A programming API for AI



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.



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. What does model.fit do?

1 / 1 point



It makes a model fit available memory



It determines if your activity is good for your body



It optimizes an existing model



It trains the neural network to fit one set of values to another



Correct

Correct! The training takes place on the fit command.