Question 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.

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)?

0 / 1 point

Programming the Data

Labelling the Data

Categorizing the Data

Learning the Data

Incorrect

You do classify data, but you have to tag it somehow.

3.

Question 3

What is a Dense layer?

1 / 1 point

A layer of connected neurons

A layer of disconnected neurons

A single neuron

An amount of mass occupying a volume

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

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.

Question 5

What does the optimizer do?

1 / 1 point

Generates a new and improved guess

Figures out how to efficiently compile your code

Measures how good the current guess is

Decides to stop training a neural network

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

An analysis that corresponds too closely or exactly to a particular set of data.

The process of getting very close to the correct answer

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

It makes a model fit available memory

It optimizes an existing model

It determines if your activity is good for your body

Correct

Correct! The training takes place on the fit command