Question Neural networks LinkedIn training

Which of the following defines an artificial neuron?

**Weighted sum of inputs + bias**

Sum of inputs + bias

Weighted sum of bias + input

What is the purpose of the Gradient descent algorithm?

**To iterate through different combinations of weights to find the best combination which minimises the error**

To minimise the bias of the function

To measure the slope/gradient of the model at different points

What is a key requirement to solving the XOR challenge?

**We need to introduce non-linearity into the functi**on.

We need to use multiple linear functions.

We require more input functions.

How do we introduce non-linearity in a neural network?

Using non-linear inputs

**Using non-linear activation functions**

Using more than one hidden layer

What is the purpose of an activation function?

**To determine if a neuron fires**

To increase the size of a neural network

To combine multiple hidden layers

Which of the following are examples of hyperparameters?

**The number of neurons in each layer**

**The activation functions for the neurons**

**The number of hidden layers**

**All of these answers**

What is the purpose of the loss function?

**To measure the accuracy or performance error of a neural network**

To determine the accuracy across a single layer

To determine the number of neurons dropped during the process

Convolving decreases the spatial size.

**TRUE**

FALSE

What is the main purpose of zero padding?

To provide a soft border for the image

To extract the maximum value of each block

**To preserve the spatial size of the input volume**

What is the main purpose of implementing drop out?

To allow for image augmentation

**To prevent overfitting**

To prevent underfitting