Training the ANN with Stochastic Gradient Descent

Step1:

Randomly initialise the weights to small numbers close to 0 BUT not 0

Step2:

Input the first observation of your dataset in the input layer. Each Feature is assigned one Neuron/Node

Step3:

Forward propagation is applied, where the input from left is propagated to the right. Neurons/Nodes are activated depending on the weights and threshold of the activation function

Step4:

Compare the predicted result with the target value. Calculate the error

Step5:

Backpropagation is from right to left. The error is back propagated and the weights are adjusted to how much they are responsible for the error

Step6:

Repeat Steps 1 to 5 and update the weights

Step7:

When the whole training set passed through the ANN, that makes an epoch. Redo more epochs.