

Recap: MLP, CNN and Transfer Learning

Recap: MLP, CNN and Transfer Learning

1. Multi Layer Perceptron (MLP)



Recap: MLP, CNN and Transfer Learning

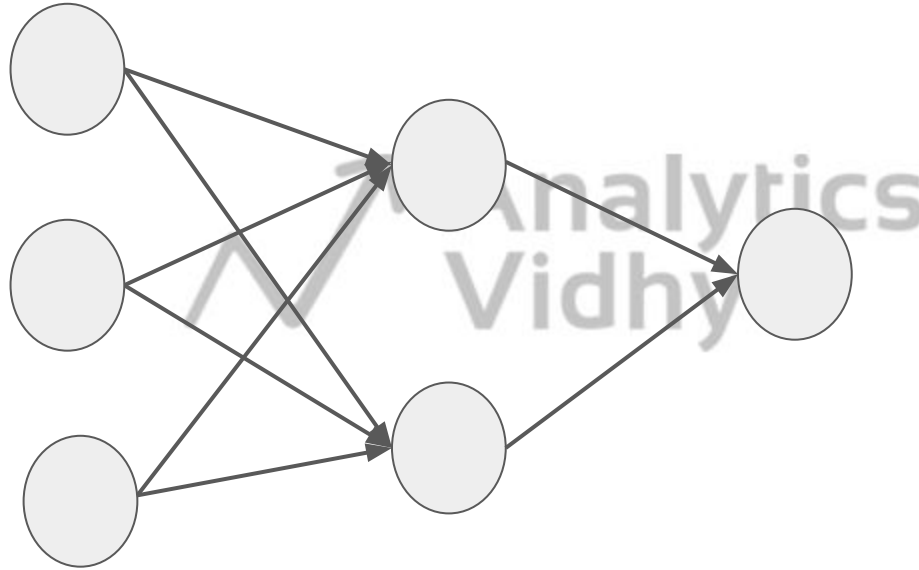
1. Multi Layer Perceptron (MLP)
2. Convolutional Neural Networks (CNNs)



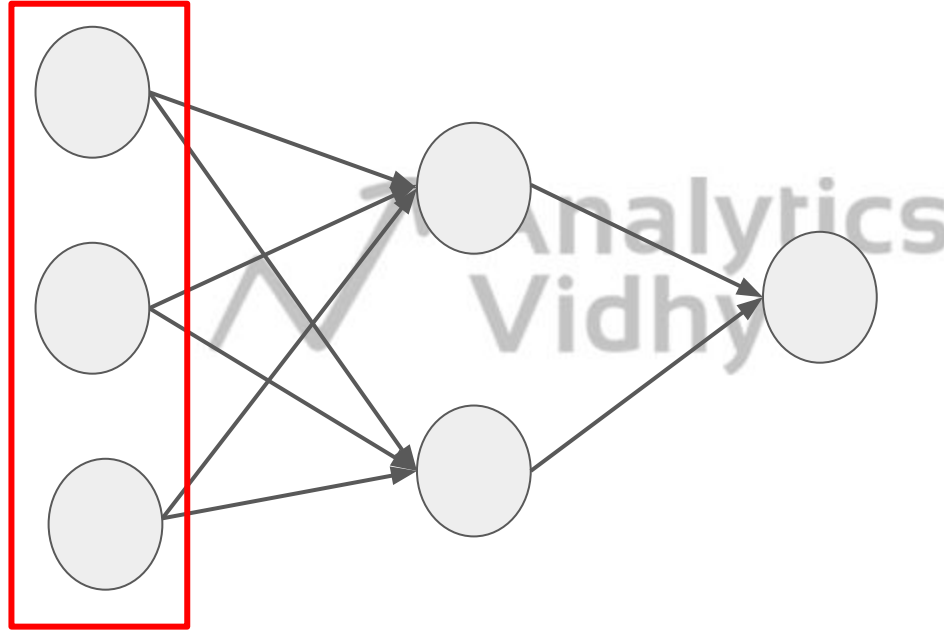
Recap: MLP, CNN and Transfer Learning

1. Multi Layer Perceptron (MLP)
2. Convolutional Neural Networks (CNNs)
3. Transfer Learning

Multi Layer Perceptron (MLP)

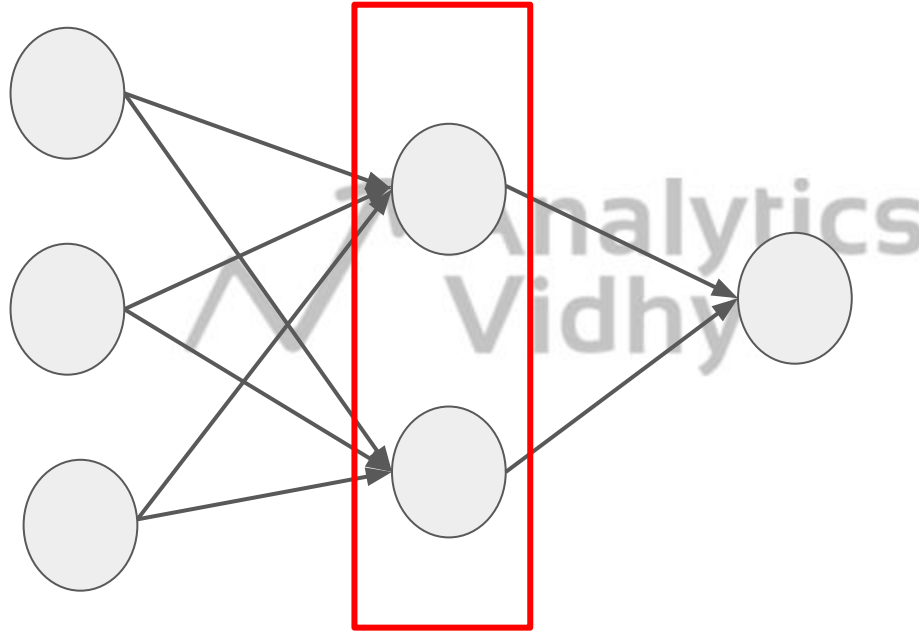


Multi Layer Perceptron (MLP)



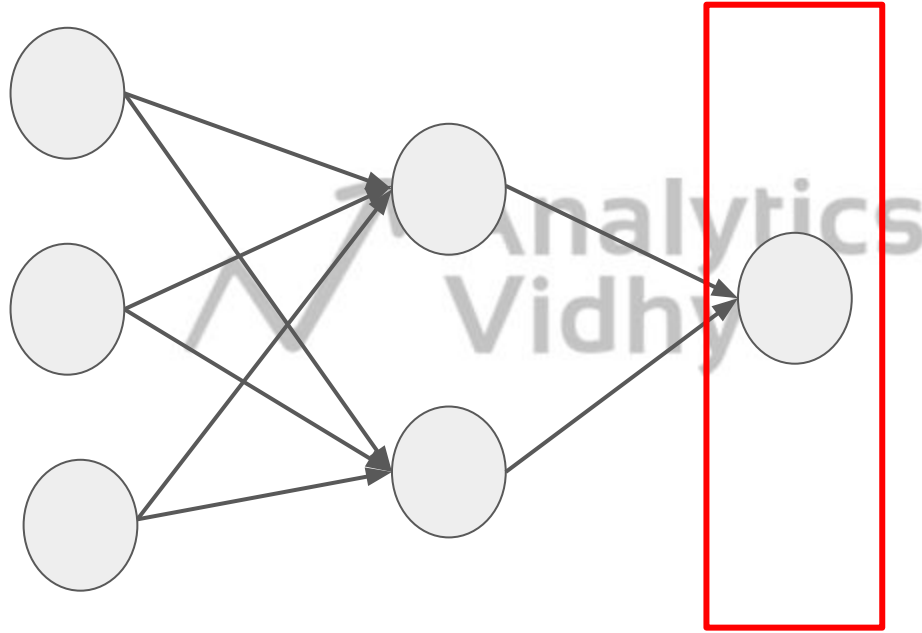
Input Layer

Multi Layer Perceptron (MLP)



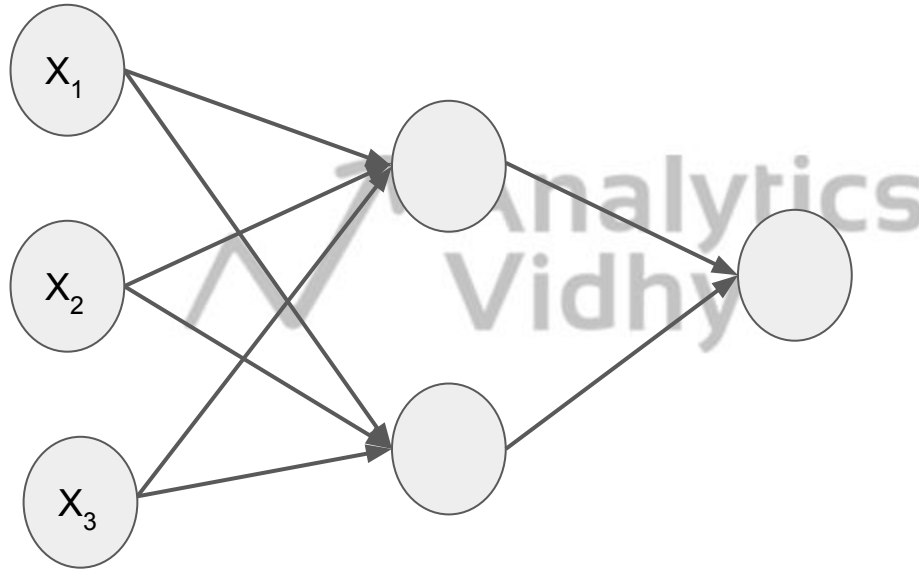
Hidden Layer

Multi Layer Perceptron (MLP)

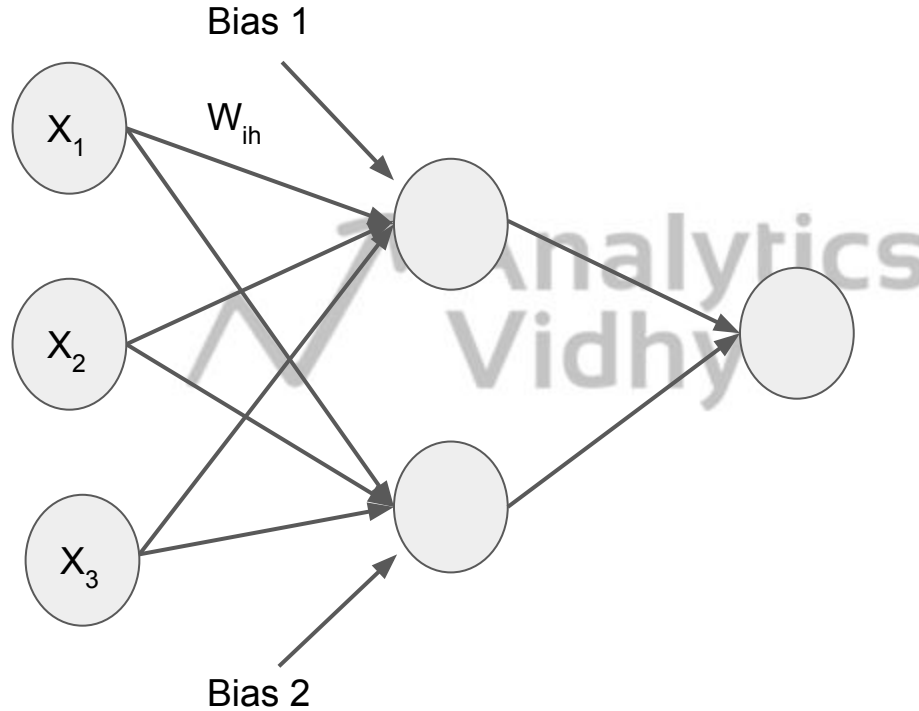


Output Layer

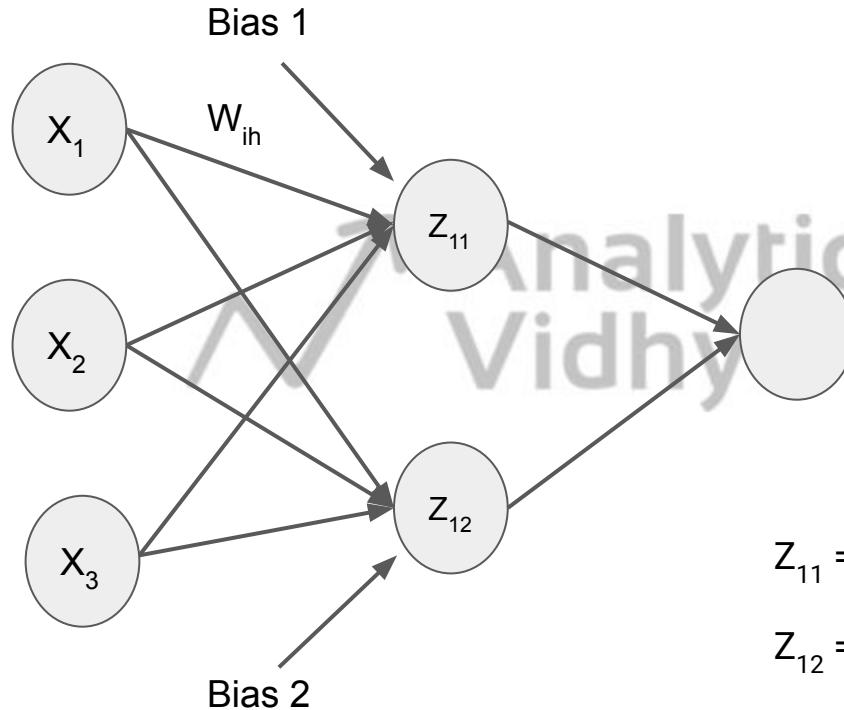
Multi Layer Perceptron (MLP)



Multi Layer Perceptron (MLP)



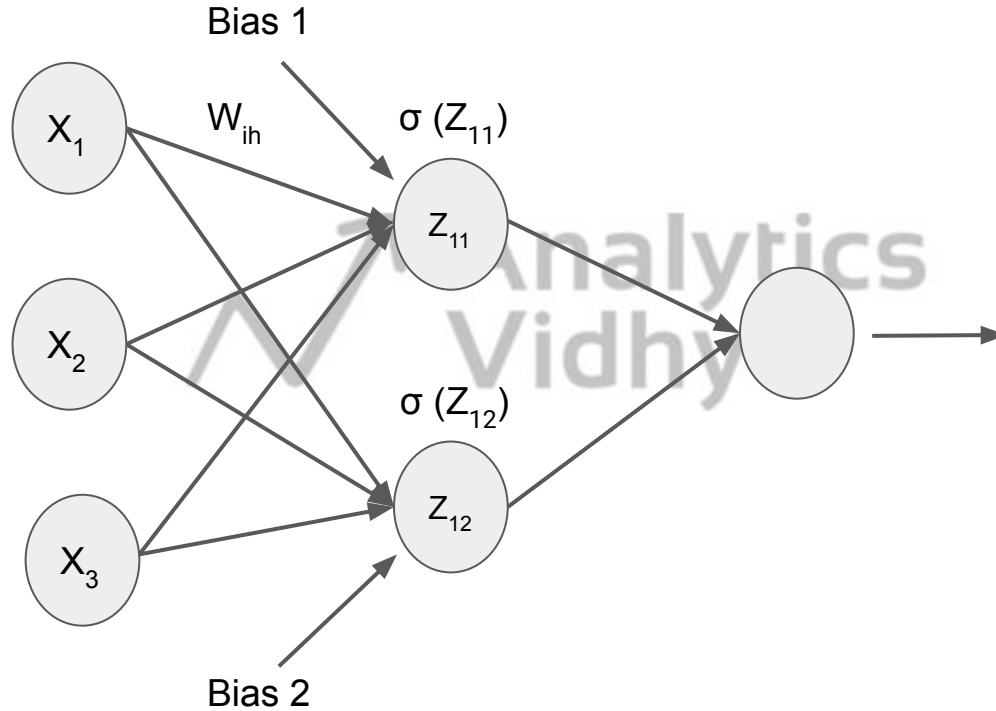
Multi Layer Perceptron (MLP)



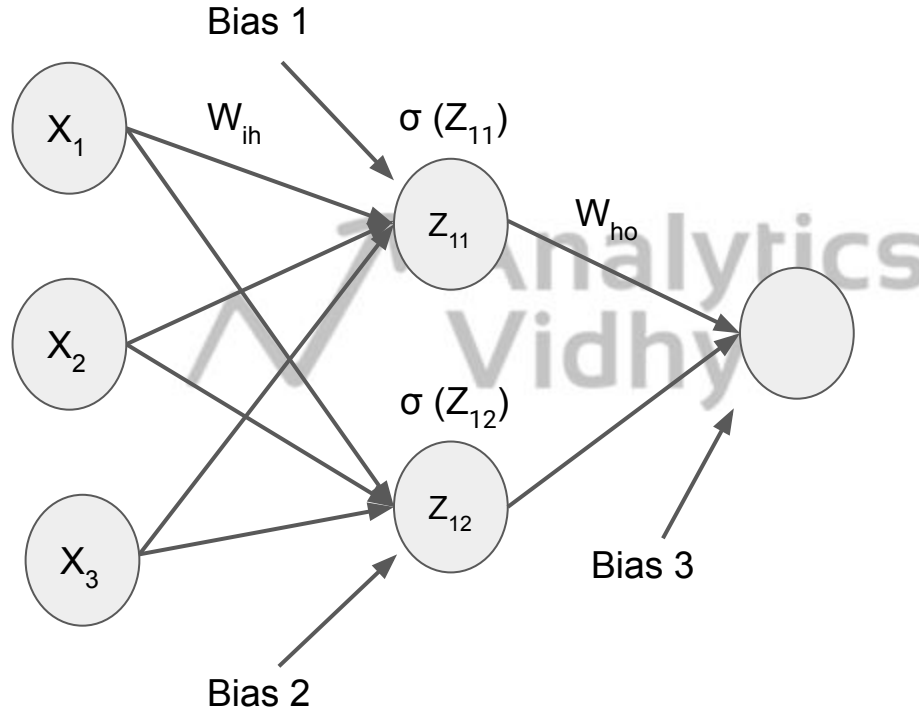
$$Z_{11} = X_1 * w_1 + X_2 * w_2 + X_3 * w_3 + b_1$$

$$Z_{12} = X_1 * w_4 + X_2 * w_5 + X_3 * w_6 + b_2$$

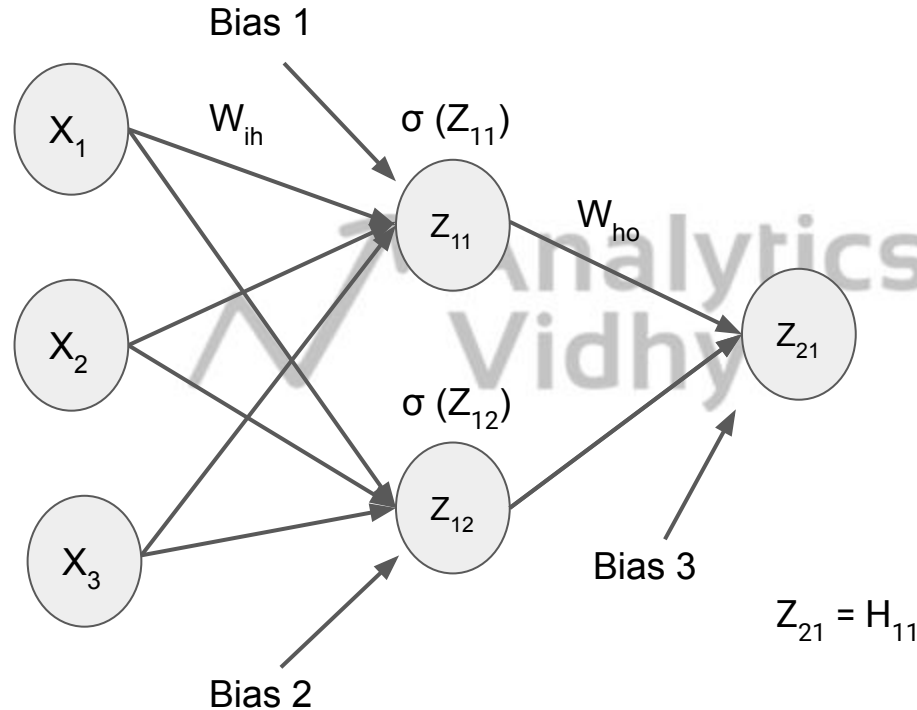
Multi Layer Perceptron (MLP)



Multi Layer Perceptron (MLP)

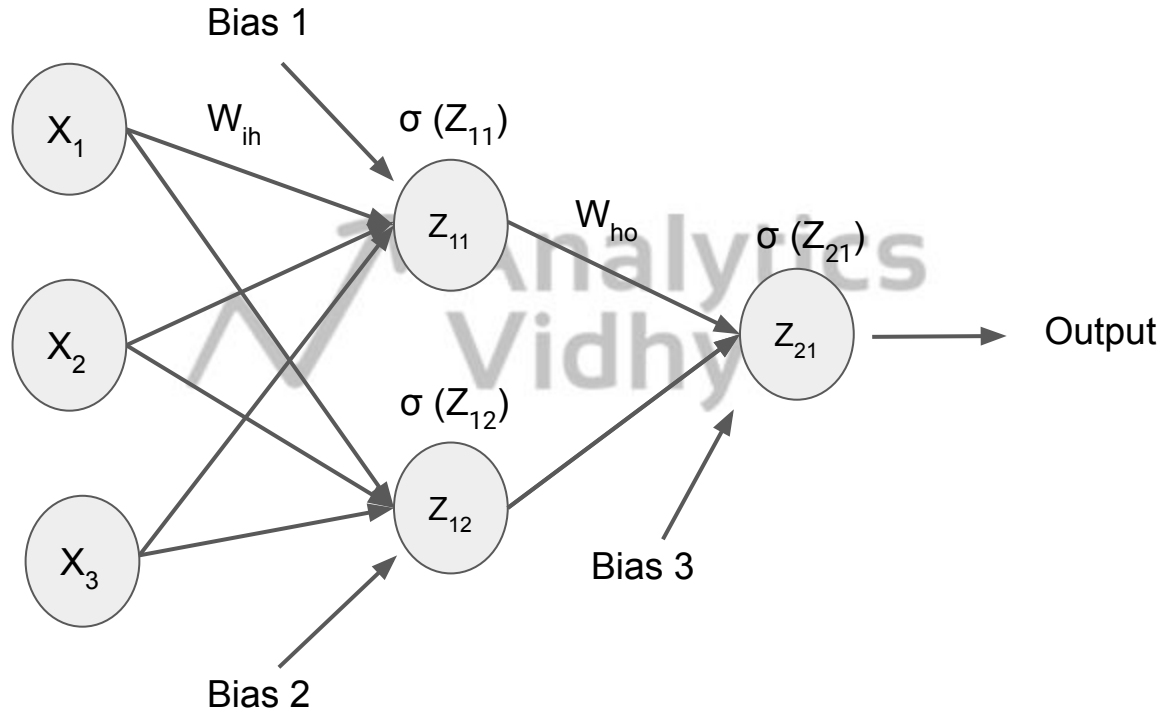


Multi Layer Perceptron (MLP)

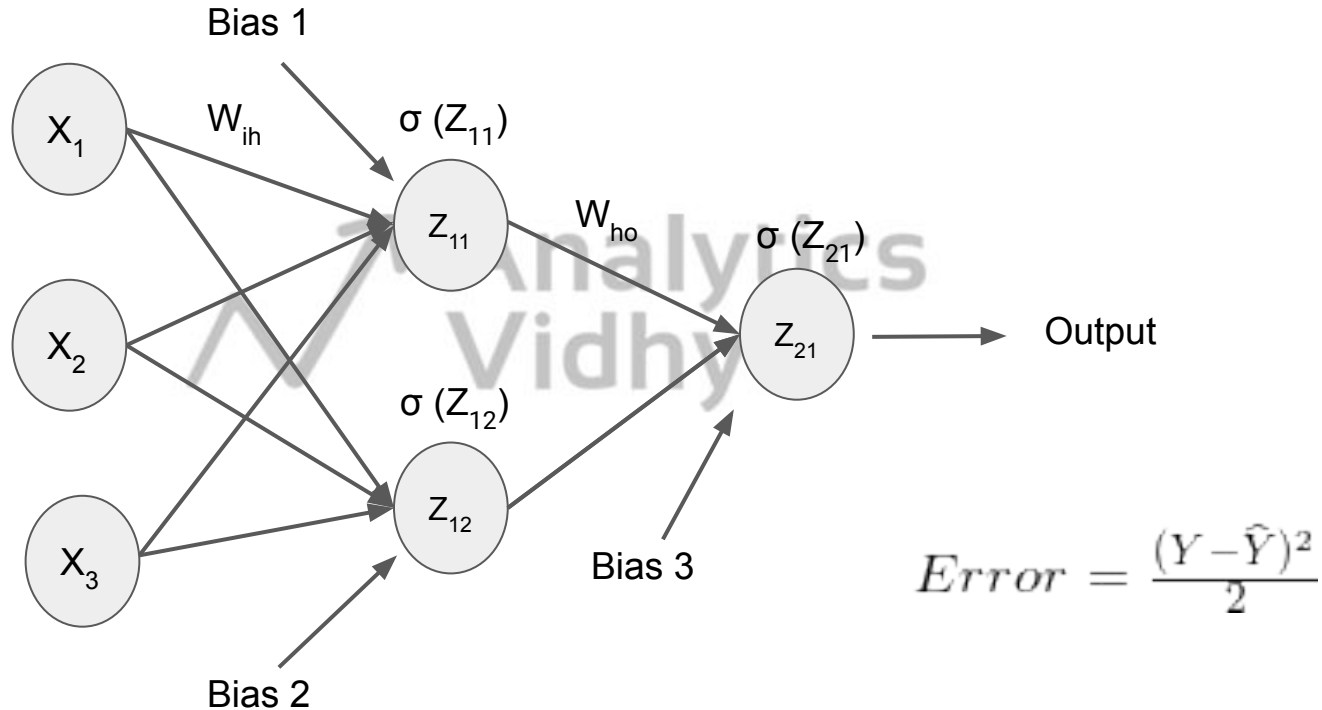


$$Z_{21} = H_{11} * w_7 + H_{12} * w_8 + b_3$$

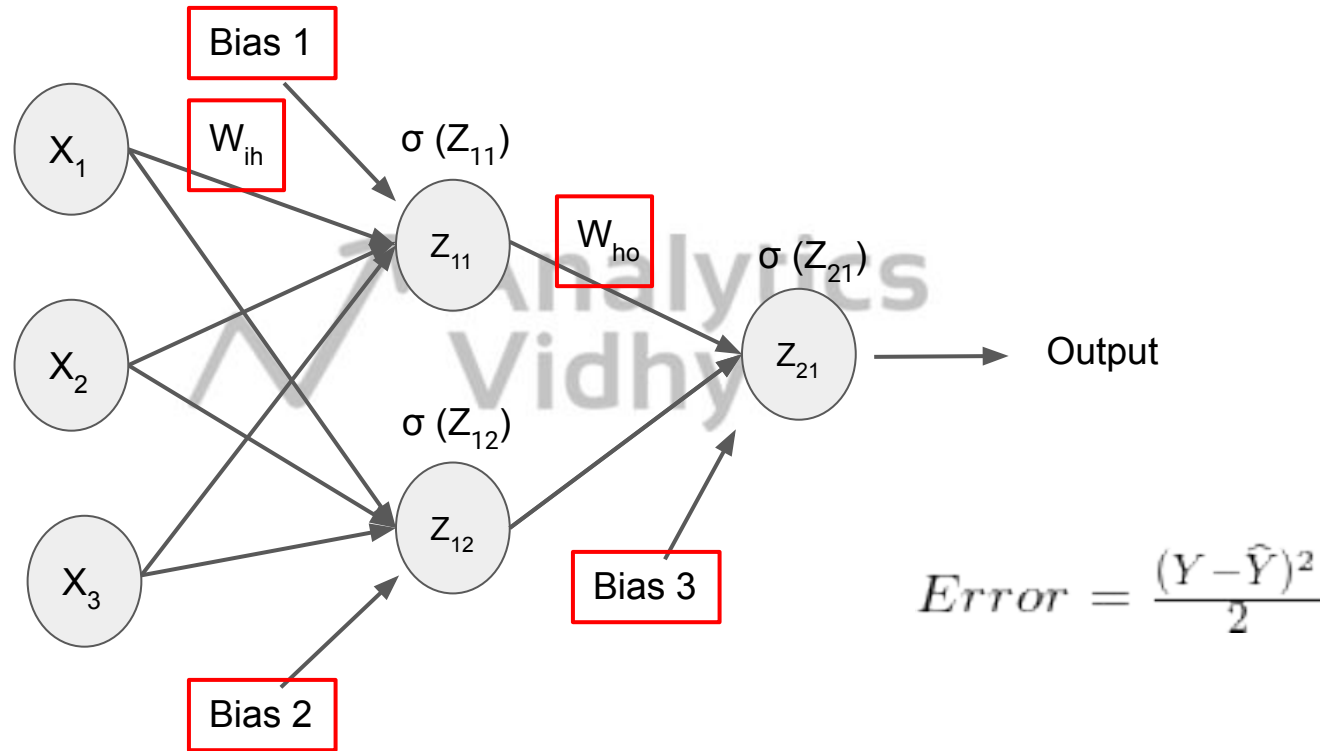
Multi Layer Perceptron (MLP)



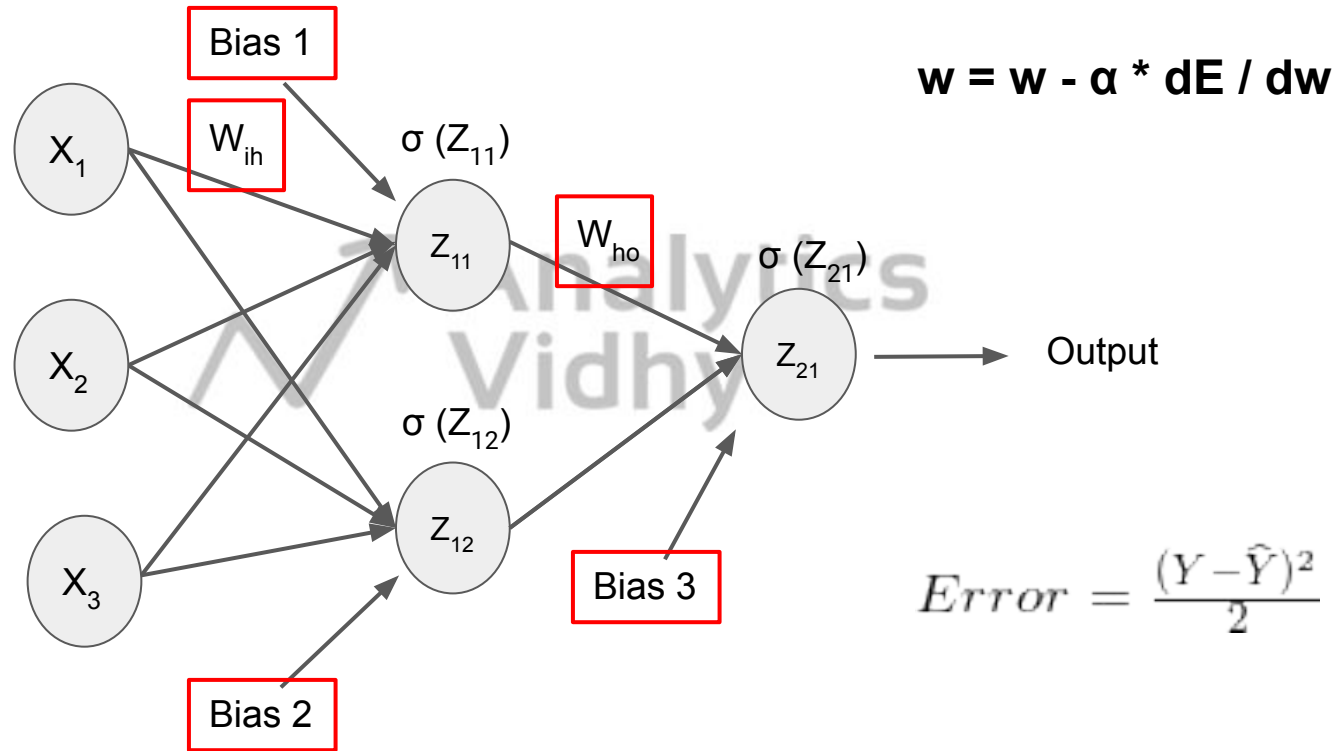
Multi Layer Perceptron (MLP)



Multi Layer Perceptron (MLP)



Multi Layer Perceptron (MLP)



Emergency vs Non-Emergency vehicle classification

Problem Statement: To classify the images of vehicles as emergency or non-emergency



Emergency Vehicle



Non - Emergency Vehicle



Thank You