

## FullyConnectedLayer:

Converts input features to a vector of a specific size, with OutputSize determining the dimension of the output.

Input: Typically a vector representing features from the previous layer.

Output: Also a vector, with a size determined by the OutputSize.

## SoftmaxLayer:

Converts the input into a probability distribution for multi-class classification.

Input: A vector, usually the output from the fully connected layer.

Output: A vector of the same size as the input, representing the probability of each class.

## ClassificationLayer:

Computes the classification loss, guiding the model's training.

Input: Typically a probability vector from the softmax layer.

Output: The loss value, used for backpropagation to update the model weights.

Deep Network Designer

DESIGNER

NEW BUILD NAVIGATE LAYOUT ANALYSIS EXPORT

Layer library

Filter layers...

- maxPooling2dLayer (for unpooling)
- maxUnpooling2dLayer
- maxPooling3dLayer
- globalMaxPooling1dLayer
- globalMaxPooling2dLayer
- globalMaxPooling3dLayer

COMBINATION

- additionLayer
- depthConcatenationLayer
- concatenationLayer
- multiplicationLayer

OUTPUT

- softmaxLayer
- sigmoidLayer
- classificationLayer
- regressionLayer

Designer Data Training

pool5 globalAverage...  
to fullyConnected...  
softmax softmaxLayer  
classoutput classificationLa...

fullyConnectedLayer

Name: fc

InputSize: auto

OutputSize: 3

Weights: []

Bias: []

WeightLearnRateFactor: 1

WeightL2Factor: 1

BiasLearnRateFactor: 1

BiasL2Factor: 0

WeightsInitializer: glorot

BiasInitializer: zeros

Overview