Module: tf.layers

Defined in `tensorflow/python/layers/layers.py`.

This library provides a set of high-level neural networks layers.

Classes

`class AveragePooling1D`: Average Pooling layer for 1D inputs.

`class AveragePooling2D`: Average pooling layer for 2D inputs (e.g. images).

`class AveragePooling3D`: Average pooling layer for 3D inputs (e.g. volumes).

`class BatchNormalization`: Batch Normalization layer from http://arxiv.org/abs/1502.03167.

`class Conv1D`: 1D convolution layer (e.g. temporal convolution).

`class Conv2D`: 2D convolution layer (e.g. spatial convolution over images).

`class Conv2DTranspose`: Transposed 2D convolution layer (sometimes called 2D Deconvolution).

`class Conv3D`: 3D convolution layer (e.g. spatial convolution over volumes).

`class Conv3DTranspose`: Transposed 3D convolution layer (sometimes called 3D Deconvolution).

`class Dense`: Densely-connected layer class.

`class Dropout`: Applies Dropout to the input.

`class Flatten`: Flattens an input tensor while preserving the batch axis (axis 0).

`class InputSpec`: Specifies the ndim, dtype and shape of every input to a layer.

`class Layer`: Base layer class.

`class MaxPooling1D`: Max Pooling layer for 1D inputs.

`class MaxPooling2D`: Max pooling layer for 2D inputs (e.g. images).

`class MaxPooling3D`: Max pooling layer for 3D inputs (e.g. volumes).

`class SeparableConv2D`: Depthwise separable 2D convolution.

Functions

`Input(...)`: `Input()` is used to instantiate an input tensor for use with a `Network`.

`average_pooling1d(...)`: Average Pooling layer for 1D inputs.

`average_pooling2d(...)` : Average pooling layer for 2D inputs (e.g. images).

`average_pooling3d(...)` : Average pooling layer for 3D inputs (e.g. volumes).

`batch_normalization(...)` : Functional interface for the batch normalization layer.

`conv1d(...)` : Functional interface for 1D convolution layer (e.g. temporal convolution).

`conv2d(...)` : Functional interface for the 2D convolution layer.

`conv2d_transpose(...)` : Functional interface for transposed 2D convolution layer.

`conv3d(...)` : Functional interface for the 3D convolution layer.

`conv3d_transpose(...)` : Functional interface for transposed 3D convolution layer.

`dense(...)` : Functional interface for the densely-connected layer.

`dropout(...)` : Applies Dropout to the input.

`flatten(...)` : Flattens an input tensor while preserving the batch axis (axis 0).

`max_pooling1d(...)` : Max Pooling layer for 1D inputs.

`max_pooling2d(...)` : Max pooling layer for 2D inputs (e.g. images).

`max_pooling3d(...)` : Max pooling layer for 3D inputs (e.g. volumes).

`separable_conv2d(...)` : Functional interface for the depthwise separable 2D convolution layer.

Last updated November 2, 2017.