tf.contrib.layers.max_pool2d

```
max_pool2d(
    inputs,
    kernel_size,
    stride=2,
    padding='VALID',
    data_format=DATA_FORMAT_NHWC,
    outputs_collections=None,
    scope=None
)
```

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

See the guide: Layers (contrib) > Higher level ops for building neural network layers

Adds a 2D Max Pooling op.

It is assumed that the pooling is done per image but not in batch or channels.

Args:

- `inputs`: A 4-D tensor of shape `[batch_size, height, width, channels]` if `data_format` is `NHWC`, and `[batch_size, channels, height, width]` if `data_format` is `NCHW`.
- `kernel_size`: A list of length 2: [kernel_height, kernel_width] of the pooling kernel over which the op is computed. Can be an int if both values are the same.
- `stride`: A list of length 2: [stride_height, stride_width]. Can be an int if both strides are the same. Note that presently both strides must have the same value.
- `padding`: The padding method, either 'VALID' or 'SAME'.
- `data_format`: A string. `NHWC` (default) and `NCHW` are supported.
- `outputs_collections`: The collections to which the outputs are added.
- `scope`: Optional scope for name_scope.

Returns:

A `Tensor` representing the results of the pooling operation.

Raises:

- `ValueError`: If `data_format` is neither `NHWC` nor `NCHW`.
- `ValueError`: If 'kernel_size' is not a 2-D list

Last updated November 2, 2017.

Stay Connected

Blog

GitHub

Twitter

Support

Issue Tracker

Release Notes

Stack Overflow

English

Terms | **Privacy**