

tf.nn.avg_pool

```
avg_pool(  
    value,  
    ksize,  
    strides,  
    padding,  
    data_format='NHWC',  
    name=None  
)
```

Defined in [tensorflow/python/ops/nn_ops.py](#).

See the guide: [Neural Network > Pooling](#)

Performs the average pooling on the input.

Each entry in **output** is the mean of the corresponding size **ksize** window in **value**.

Args:

- **value**: A 4-D **Tensor** of shape **[batch, height, width, channels]** and type **float32**, **float64**, **qint8**, **quint8**, or **qint32**.
- **ksize**: A 1-D int Tensor of 4 elements. The size of the window for each dimension of the input tensor.
- **strides**: A 1-D int Tensor of 4 elements. The stride of the sliding window for each dimension of the input tensor.
- **padding**: A string, either **'VALID'** or **'SAME'**. The padding algorithm. See the [comment here](#)
- **data_format**: A string. 'NHWC' and 'NCHW' are supported.
- **name**: Optional name for the operation.

Returns:

A **Tensor** with the same type as **value**. The average pooled output tensor.

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Last updated November 2, 2017.

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