tf.nn.avg_pool3d

```
avg_pool3d(
    input,
    ksize,
    strides,
    padding,
    data_format='NDHWC',
    name=None
)
```

Defined in `tensorflow/python/ops/gen_nn_ops.py`.

See the guide: Neural Network > Pooling

Performs 3D average pooling on the input.

Args:

- `input`: A `Tensor`. Must be one of the following types: `float32`, `float64`. Shape `[batch, depth, rows, cols, channels]` tensor to pool over.
- `ksize`: A list of `ints` that has length `>= 5`. 1-D tensor of length 5. The size of the window for each dimension of the input tensor. Must have `ksize[0] = ksize[4] = 1`.
- `strides`: A list of `ints` that has length `>= 5`. 1-D tensor of length 5. The stride of the sliding window for each dimension of `input`. Must have `strides[0] = strides[4] = 1`.
- `padding`: A `string` from: `"SAME", "VALID"`. The type of padding algorithm to use.
- `data_format`: An optional `string` from: `"NDHWC", "NCDHW"`. Defaults to `"NDHWC"`. The data format of the input and output data. With the default format "NDHWC", the data is stored in the order of: [batch, in_depth, in_height, in_width, in_channels]. Alternatively, the format could be "NCDHW", the data storage order is: [batch, in_channels, in_depth, in_height, in_width].
- `name`: A name for the operation (optional).

Returns:

A `Tensor`. Has the same type as `input`. The average pooled output tensor.

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