

## tf.keras.backend.conv3d

```
conv3d(  
    x,  
    kernel,  
    strides=(1, 1, 1),  
    padding='valid',  
    data_format=None,  
    dilation_rate=(1, 1, 1)  
)
```

Defined in [tensorflow/python/keras/\\_impl/keras/backend.py](#).

3D convolution.

## Arguments:

- `x`: Tensor or variable.
- `kernel`: kernel tensor.
- `strides`: strides tuple.
- `padding`: string, `"same"` or `"valid"`.
- `data_format`: `"channels_last"` or `"channels_first"`. Whether to use Theano or TensorFlow data format for inputs/kernels/outputs.
- `dilation_rate`: tuple of 3 integers.

## Returns:

A tensor, result of 3D convolution.

## Raises:

- `ValueError`: if `data_format` is neither `channels_last` or `channels_first`.

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