

tf.keras.backend.separable_conv2d

```
separable_conv2d(  
    x,  
    depthwise_kernel,  
    pointwise_kernel,  
    strides=(1, 1),  
    padding='valid',  
    data_format=None,  
    dilation_rate=(1, 1)  
)
```

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

2D convolution with separable filters.

Arguments:

- `x`: input tensor
- `depthwise_kernel`: convolution kernel for the depthwise convolution.
- `pointwise_kernel`: kernel for the 1x1 convolution.
- `strides`: strides tuple (length 2).
- `padding`: padding mode, "valid" or "same".
- `data_format`: data format, "channels_first" or "channels_last".
- `dilation_rate`: tuple of integers, dilation rates for the separable convolution.

Returns:

Output tensor.

Raises:

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

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