tf.nn.conv3d_transpose

```
conv3d_transpose(
    value,
    filter,
    output_shape,
    strides,
    padding='SAME',
    data_format='NDHWC',
    name=None
)
```

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

See the guide: Neural Network > Convolution

The transpose of `conv3d`.

This operation is sometimes called "deconvolution" after Deconvolutional Networks, but is actually the transpose (gradient) of `conv3d` rather than an actual deconvolution.

Args:

- `value`: A 5-D `Tensor` of type `float` and shape `[batch, depth, height, width, in_channels]`.
- `filter`: A 5-D `Tensor` with the same type as `value` and shape `[depth, height, width, output_channels, in_channels]`. `filter`'s `in_channels` dimension must match that of `value`.
- `output_shape`: A 1-D `Tensor` representing the output shape of the deconvolution op.
- `strides`: A list of ints. 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, either `'NDHWC'` or `'NCDHW'` specifying the layout of the input and output tensors. Defaults to `'NDHWC'`.
- `name`: Optional name for the returned tensor.

Returns:

A `Tensor` with the same type as `value`.

Raises:

- `ValueError`: If input/output depth does not match `filter`'s shape, or if padding is other than `'VALID'` or `'SAME'`.

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