

tf.nn.conv3d_backprop_filter_v2

```
conv3d_backprop_filter_v2(  
    input,  
    filter_sizes,  
    out_backprop,  
    strides,  
    padding,  
    data_format='NDHWC',  
    name=None  
)
```

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

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

Computes the gradients of 3-D convolution with respect to the filter.

Args:

- `input`: A **Tensor**. Must be one of the following types: `float32`, `float64`. Shape `[batch, depth, rows, cols, in_channels]`.
- `filter_sizes`: A **Tensor** of type `int32`. An integer vector representing the tensor shape of `filter`, where `filter` is a 5-D `[filter_depth, filter_height, filter_width, in_channels, out_channels]` tensor.
- `out_backprop`: A **Tensor**. Must have the same type as `input`. Backprop signal of shape `[batch, out_depth, out_rows, out_cols, out_channels]`.
- `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`.

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