

tf.nn.l2_normalize

```
l2_normalize(  
    x,  
    dim,  
    epsilon=1e-12,  
    name=None  
)
```

Defined in [tensorflow/python/ops/nn_impl.py](#).

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

Normalizes along dimension `dim` using an L2 norm.

For a 1-D tensor with `dim = 0`, computes

```
output = x / sqrt(max(sum(x**2), epsilon))
```

For `x` with more dimensions, independently normalizes each 1-D slice along dimension `dim`.

Args:

- `x`: A **Tensor**.
- `dim`: Dimension along which to normalize. A scalar or a vector of integers.
- `epsilon`: A lower bound value for the norm. Will use `sqrt(epsilon)` as the divisor if `norm < sqrt(epsilon)`.
- `name`: A name for this operation (optional).

Returns:

A **Tensor** with the same shape as `x`.

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