

tf.sparse_transpose

```
sparse_transpose(  
    sp_input,  
    perm=None,  
    name=None  
)
```

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

See the guide: [Sparse Tensors > Manipulation](#)

Transposes a **SparseTensor**

The returned tensor's dimension i will correspond to the input dimension **perm[i]**. If **perm** is not given, it is set to $(n-1...0)$, where n is the rank of the input tensor. Hence by default, this operation performs a regular matrix transpose on 2-D input Tensors.

For example, if **sp_input** has shape **[4, 5]** and **indices / values**:

```
[0, 3]: b  
[0, 1]: a  
[3, 1]: d  
[2, 0]: c
```

then the output will be a **SparseTensor** of shape **[5, 4]** and **indices / values**:

```
[0, 2]: c  
[1, 0]: a  
[1, 3]: d  
[3, 0]: b
```

Args:

- sp_input**: The input **SparseTensor**.
- perm**: A permutation of the dimensions of **sp_input**.
- name**: A name prefix for the returned tensors (optional)

Returns:

A transposed **SparseTensor**.

Raises:

- TypeError**: If **sp_input** is not a **SparseTensor**.

Stay Connected

[Blog](#)

[GitHub](#)

[Twitter](#)

Support

[Issue Tracker](#)

[Release Notes](#)

[Stack Overflow](#)

English

[Terms](#) | [Privacy](#)