tf.contrib.kfac.fisher_blocks.KroneckerProductFB

Class `KroneckerProductFB`

Inherits From: `FisherBlock`

Defined in `tensorflow/contrib/kfac/python/ops/fisher_blocks.py`.

A base class for FisherBlocks with separate input and output factors.

The Fisher block is approximated as a Kronecker product of the input and output factors.

Methods

`__init__`

```
__init__(layer_collection)
```

`full_fisher_block`

```
full_fisher_block()
```

Explicitly constructs the full Fisher block.

Used for testing purposes. (In general, the result may be very large.)

Returns:

The full Fisher block.

`instantiate_factors`

```
instantiate_factors(
    grads_list,
    damping
)
```

Creates and registers the component factors of this Fisher block.

Args:

- `grads_list`: A list gradients (each a Tensor or tuple of Tensors) with respect to the tensors returned by tensors_to_compute_grads() that are to be used to estimate the block.
- `damping`: The damping factor (float or Tensor).

`multiply`

```
multiply(vector)
```

`multiply_inverse`

```
multiply_inverse(vector)
```

`tensors_to_compute_grads`

```
tensors_to_compute_grads()
```

Returns the Tensor(s) with respect to which this FisherBlock needs grads.
