tf.contrib.kfac.fisher_blocks.FullFB

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Class `FullFB`

Inherits From: `FisherBlock`

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

FisherBlock using a full matrix estimate (no approximations).

FullFB uses a full matrix estimate (no approximations), and should only ever be used for very low dimensional parameters.

Note that this uses the naive "square the sum estimator", and so is applicable to any type of parameter in principle, but has very high variance.

Methods

`__init__`

```
__init__(
    layer_collection,
    params,
    batch_size
)
```

Creates a FullFB block.

Args:

- `layer_collection`: The collection of all layers in the K-FAC approximate Fisher information matrix to which this FisherBlock belongs.
- `params`: The parameters of this layer (Tensor or tuple of Tensors).
- `batch_size`: The batch size, used in the covariance estimator.

`full_fisher_block`

```
full_fisher_block()
```

Explicitly constructs the full Fisher block.

instantiate_factors

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

multiply

```
multiply(vector)
```

multiply_inverse

```
multiply_inverse(vector)
```

tensors_to_compute_grads

```
tensors_to_compute_grads()
```

Last updated November 2, 2017.