tf.contrib.kfac.fisher_blocks.NaiveDiagonalFB

Class `NaiveDiagonalFB`

Inherits From: `FisherBlock`

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

FisherBlock using a diagonal matrix approximation.

This type of approximation is generically applicable but quite primitive.

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 NaiveDiagonalFB 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()
```

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.