

tf.contrib.kfac.fisher_blocks.FullyConnectedKFACBasicFB

Contents

Class FullyConnectedKFACBasicFB

Methods

`__init__``full_fisher_block`Class **FullyConnectedKFACBasicFB**Inherits From: [KroneckerProductFB](#)Defined in [tensorflow/contrib/kfac/python/ops/fisher_blocks.py](#).

K-FAC FisherBlock for fully-connected (dense) layers.

This uses the Kronecker-factorized approximation from the original K-FAC paper (<https://arxiv.org/abs/1503.05671>)

Methods

`__init__`

```
__init__(  
    layer_collection,  
    inputs,  
    outputs,  
    has_bias=False  
)
```

Creates a FullyConnectedKFACBasicFB block.

Args:

- `layer_collection`: The collection of all layers in the K-FAC approximate Fisher information matrix to which this FisherBlock belongs.
- `inputs`: The Tensor of input activations to this layer.
- `outputs`: The Tensor of output pre-activations from this layer.
- `has_bias`: Whether the component Kronecker factors have an additive bias. (Default: False)

`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  
)
```

multiply

```
multiply(vector)
```

multiply_inverse

```
multiply_inverse(vector)
```

tensors_to_compute_grads

```
tensors_to_compute_grads()
```

Except as otherwise noted, the content of this page is licensed under the [Creative Commons Attribution 3.0 License](#), and code samples are licensed under the [Apache 2.0 License](#). For details, see our [Site Policies](#). Java is a registered trademark of Oracle and/or its affiliates.

Last updated November 2, 2017.

Stay Connected

[Blog](#)

[GitHub](#)

[Twitter](#)

Support

[Issue Tracker](#)

[Release Notes](#)

[Stack Overflow](#)

English

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