TensorFlow   API r1.4

tf.contrib.kfac.loss_functions.NormalMeanNegativeLogProbLoss

Contents

Class **NormalMeanNegativeLogProbLoss**

Inherits From: `DistributionNegativeLogProbLoss` , `NaturalParamsNegativeLogProbLoss`

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

Neg log prob loss for a normal distribution parameterized by a mean vector.

Note that the covariance is treated as a constant 'var' times the identity. Also note that the Fisher for such a normal distribution with respect the mean parameter is given by:

F = (1/var) * I

See for example https://www.ii.pwr.edu.pl/~tomczak/PDF/[JMT]Fisher_inf.pdf.

Properties

fisher_factor_inner_shape

fisher_factor_inner_static_shape

hessian_factor_inner_shape

hessian_factor_inner_static_shape

inputs

params

Methods

__init__

```
__init__(
    mean,
    var=0.5,
    targets=None,
    seed=None
)
```

evaluate

```
evaluate()
```

Evaluate the loss function.

evaluate_on_sample

```
evaluate_on_sample(seed=None)
```

multiply_fisher

```
multiply_fisher(vector)
```

multiply_fisher_factor

```
multiply_fisher_factor(vector)
```

multiply_fisher_factor_replicated_one_hot

```
multiply_fisher_factor_replicated_one_hot(index)
```

multiply_fisher_factor_transpose

```
multiply_fisher_factor_transpose(vector)
```

multiply_hessian

```
multiply_hessian(vector)
```

multiply_hessian_factor

```
multiply_hessian_factor(vector)
```

multiply_hessian_factor_replicated_one_hot

```
multiply_hessian_factor_replicated_one_hot(index)
```

multiply_hessian_factor_transpose

```
multiply_hessian_factor_transpose(vector)
```

sample

```
sample(seed)
```

Stay Connected

Blog

GitHub

Twitter

Support

Issue Tracker

Release Notes

Stack Overflow

English

Terms | **Privacy**