

## tf.contrib.bayesflow.stochastic\_tensor.BaseStochasticTensor

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## Class BaseStochasticTensor

Defined in `tensorflow/contrib/bayesflow/python/ops/stochastic_tensor_impl.py`.

See the guide: [BayesFlow Stochastic Tensors \(contrib\) > Stochastic Tensor Classes](#)

Base Class for Tensor-like objects that emit stochastic values.

## Properties

### dtype

### graph

### name

## Methods

### \_\_init\_\_

```
__init__()
```

### loss

```
loss(sample_loss)
```

Returns the term to add to the surrogate loss.

This method is called by `surrogate_loss`. The input `sample_loss` should have already had `stop_gradient` applied to it. This is because the `surrogate_loss` usually provides a Monte Carlo sample term of the form `differentiable_surrogate * sample_loss` where `sample_loss` is considered constant with respect to the input for purposes of the gradient.

### Args:

- `sample_loss`: `Tensor`, sample loss downstream of this `StochasticTensor`.

Returns:

Either `None` or a `Tensor` .

**value**

```
value(name=None)
```

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Last updated November 2, 2017.

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