

tf.contrib.bayesflow.csiszar_divergence.total_variation

```
total_variation(  
    logu,  
    name=None  
)
```

Defined in [tensorflow/contrib/bayesflow/python/ops/csiszar_divergence_impl.py](#).

The Total Variation Csiszar-function in log-space.

A Csiszar-function is a member of,

$$F = \{ f: \mathbb{R}_+ \rightarrow \mathbb{R} : f \text{ convex} \}.$$

The Total-Variation Csiszar-function is:

$$f(u) = 0.5 |u - 1|$$



Warning: this function makes non-log-space calculations and may therefore be numerically unstable for $|\log u| \gg 0$.

Args:

- `logu`: **float**-like **Tensor** representing $\log(u)$ from above.
- `name`: Python **str** name prefixed to Ops created by this function.

Returns:

- `total_variation_of_u`: **float**-like **Tensor** of the Csiszar-function evaluated at $u = \exp(\log u)$.

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](#)

English

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