

## tf.summary.histogram

```
histogram(  
    name,  
    values,  
    collections=None,  
    family=None  
)
```

Defined in [tensorflow/python/summary/summary.py](#).

See the guide: [Summary Operations > Generation of Summaries](#)

Outputs a **Summary** protocol buffer with a histogram.

Adding a histogram summary makes it possible to visualize your data's distribution in TensorBoard. You can see a detailed explanation of the TensorBoard histogram dashboard [here](#).

The generated **Summary** has one summary value containing a histogram for **values**.

This op reports an **InvalidArgument** error if any value is not finite.

## Args:

- **name**: A name for the generated node. Will also serve as a series name in TensorBoard.
- **values**: A real numeric **Tensor**. Any shape. Values to use to build the histogram.
- **collections**: Optional list of graph collections keys. The new summary op is added to these collections. Defaults to **[GraphKeys.SUMMARIES]**.
- **family**: Optional; if provided, used as the prefix of the summary tag name, which controls the tab name used for display on Tensorboard.

## Returns:

A scalar **Tensor** of type **string**. The serialized **Summary** protocol buffer.

---

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](#)