tf.histogram_fixed_width

```
histogram_fixed_width(
    values,
    value_range,
    nbins=100,
    dtype=tf.int32,
    name=None
)
```

Defined in `tensorflow/python/ops/histogram_ops.py`.

See the guide: Histograms > Histograms

Return histogram of values.

Given the tensor `values`, this operation returns a rank 1 histogram counting the number of entries in `values` that fell into every bin. The bins are equal width and determined by the arguments `value_range` and `nbins`.

Args:

- `values`: Numeric `Tensor`.
- `value_range`: Shape [2] `Tensor` of same `dtype` as `values`. values <= value_range[0] will be mapped to hist[0], values >= value_range[1] will be mapped to hist[-1].
- `nbins`: Scalar `int32 Tensor`. Number of histogram bins.
- `dtype`: dtype for returned histogram.
- `name`: A name for this operation (defaults to 'histogram_fixed_width').

Returns:

A 1-D `Tensor` holding histogram of values.

Examples:

```
# Bins will be:  (-inf, 1), [1, 2), [2, 3), [3, 4), [4, inf)
nbins = 5
value_range = [0.0, 5.0]
new_values = [-1.0, 0.0, 1.5, 2.0, 5.0, 15]

with tf.get_default_session() as sess:
  hist = tf.histogram_fixed_width(new_values, value_range, nbins=5)
  variables.global_variables_initializer().run()
  sess.run(hist) => [2, 1, 1, 0, 2]
```

Stay Connected

Blog

GitHub

Twitter

Support

Issue Tracker

Release Notes

Stack Overflow

English