See playlist (https://www.youtube.com/playlist?list=PLQY2H8rRoyvxtOJfAzfs0Cq5FqBuYO8e8)

tf.keras.layers.LeakyReLU

TensorFlow 1 version (/versions/r1.15/api_docs/python/tf/keras/layers/LeakyReLU)

View source on GitHub (https://github.com/tensorflow/tenso L88)

Leaky version of a Rectified Linear Unit.

Inherits From: `Layer` (https://www.tensorflow.org/api_docs/python/tf/keras/layers/Layer), `Module` (https://www.tensorflow.org/api_docs/python/tf/Module)

View aliases

Compat aliases for migration

See Migration guide (https://www.tensorflow.org/guide/migrate) for more details.

`tf.compat.v1.keras.layers.LeakyReLU` (https://www.tensorflow.org/api_docs/python/tf/keras/layers/LeakyReLU)

```
tf.keras.layers.LeakyReLU(
    alpha=0.3, **kwargs
)
```

Used in the notebooks

Used in the guide	Used in the tutorials
• Customize what happens in Model.fit (https://www.tensorflow.org/guide/keras/customizing_what_happens_in_fit) • Writing a training loop from scratch (https://www.tensorflow.org/guide/keras/writing_a_training_loop_from_scratch)	• Deep Convolutional Generative Adversari (https://www.tensorflow.org/tutorials/ge • Pix2Pix (https://www.tensorflow.org/tutorials/ge

It allows a small gradient when the unit is not active:

```
f(x) = alpha * x if x < 0
f(x) = x if x >= 0
```

Usage:

```
>>> layer = tf.keras.layers.LeakyReLU()
>>> output = layer([-3.0, -1.0, 0.0, 2.0])
>>> list(output.numpy())
[-0.9, -0.3, 0.0, 2.0]
>>> layer = tf.keras.layers.LeakyReLU(alpha=0.1)
>>> output = layer([-3.0, -1.0, 0.0, 2.0])
>>> list(output.numpy())
[-0.3, -0.1, 0.0, 2.0]
```

Input shape:

Arbitrary. Use the keyword argument `input_shape` (tuple of integers, does not include the batch axis) when using this layer as the first layer in a model.

Output shape:

Same shape as the input.

Args	
`alpha`	Float >= 0. Negative slope coefficient. Default to 0.3.