

Deep Learning

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Contents

1	Tensorflow	1
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1 Tensorflow

A is a 0-dimensional int32 tensor. `A = tf.constant(1234)`

B is a 1-dimensional int32 tensor. `B = tf.constant([123, 456, 789])`

C is a 2-dimensional int32 tensor `C = tf.constant([[123, 456, 789], [222, 333, 444]])`

A *Tensorflow Session* as shown above, is an environment for running graph. The session is in charge of allocating the operations to GPUs and/or CPUs, including remote machines.

What if you want to use a non-constant? This is where `tf.placeholder()` and `feed_dict` come into place.

You can't just set `x` to your dataset and put it in Tensorflow, because over time you'll want your Tensorflow model to take in different datasets with different parameters. You need `tf.placeholder()`.

`tf.placeholder()` returns a tensor that gets its value from data passed to the `tf.session.run()` function, allowing you to set the input right before the sessions runs.