

## TensorFlow Dropout

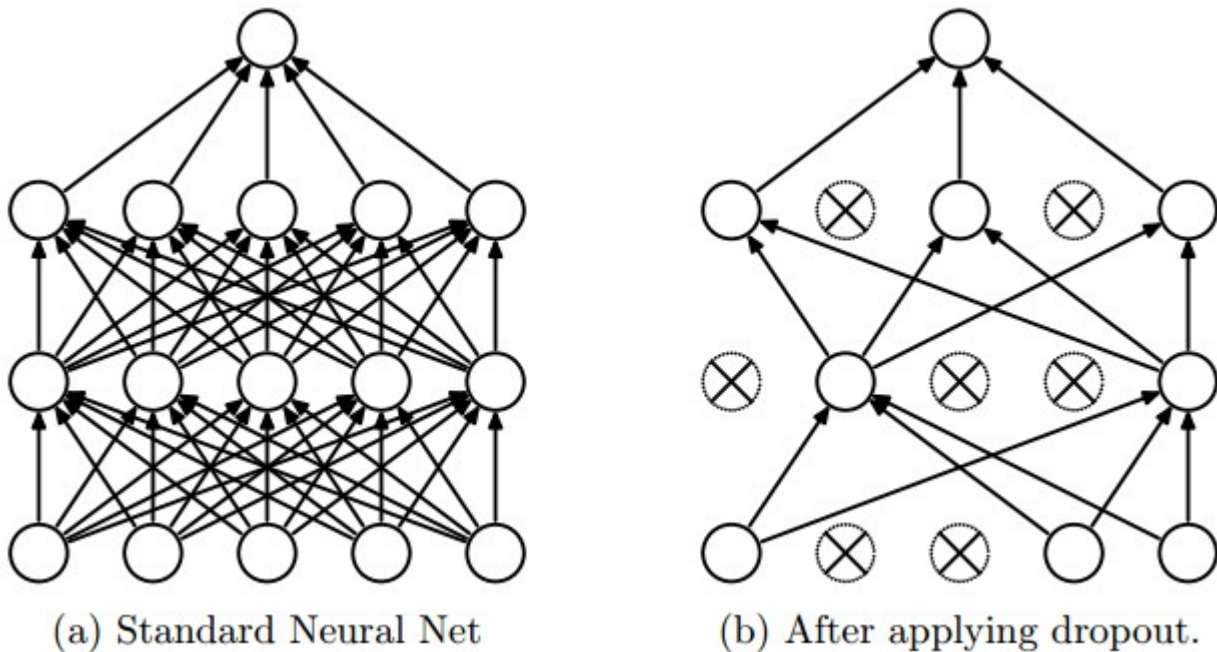


Figure 1: Taken from the paper "Dropout: A Simple Way to Prevent Neural Networks from Overfitting" (<https://www.cs.toronto.edu/~hinton/absps/JMLRdropout.pdf>)

Dropout is a regularization technique for reducing overfitting. The technique temporarily drops units (**artificial neurons**) from the network, along with all of those units' incoming and outgoing connections. Figure 1 illustrates how dropout works.

TensorFlow provides the `tf.nn.dropout()` function, which you can use to implement dropout.

Let's look at an example of how to use `tf.nn.dropout()`.

```
keep_prob = tf.placeholder(tf.float32) # probability to keep units

hidden_layer = tf.add(tf.matmul(features, weights[0]), biases[0])
hidden_layer = tf.nn.relu(hidden_layer)
```