

This is the same optimization technique used in the Intro to TensorFLow lab.

Session

```
# Initializing the variables
init = tf.global_variables_initializer()

# Launch the graph
with tf.Session() as sess:
    sess.run(init)
    # Training cycle
    for epoch in range(training_epochs):
        total_batch = int(mnist.train.num_examples/batch_size)
        # Loop over all batches
    for i in range(total_batch):
        batch_x, batch_y = mnist.train.next_batch(batch_size)
        # Run optimization op (backprop) and cost op (to get loss value)
        sess.run(optimizer, feed_dict={x: batch_x, y: batch_y})
```

The MNIST library in TensorFlow provides the ability to receive the dataset in batches. Calling the <code>mnist.train.next_batch()</code> function returns a subset of the training data.

Deeper Neural Network

