Chapter_2_Section_6_Saving_Variables

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1 Ch 02: Concept 06

1.1 Saving variables

Create an interactive session and initialize a variable:

```
In [1]: import tensorflow as tf
        sess = tf.InteractiveSession()

        raw_data = [1., 2., 8., -1., 0., 5.5, 6., 13]
        spikes = tf.Variable([False] * len(raw_data), name='spikes')
        spikes.initializer.run()
```

The saver op will enable saving and restoring:

```
In [2]: saver = tf.train.Saver()
```

Loop through the data and update the spike variable when there is a significant increase:

```
In [3]: for i in range(1, len(raw_data)):
            if raw_data[i] - raw_data[i-1] > 5:
                spikes_val = spikes.eval()
                spikes_val[i] = True
                tf.assign(spikes, spikes_val).eval()
            print(spikes.eval())

[False False False False False False False False]
[False False  True False False False False False]
[False False  True False False False False False]
[False False  True False False False False False]
[False False  True False False  True False False]
[False False  True False False  True False False]
[False False  True False False  True False  True]
```

Now, save your variable to disk!

```
In [4]: save_path = saver.save(sess, "./spikes.ckpt")
        print("spikes data saved in file: %s" % save_path)
```

```
spikes data saved in file: ./spikes.ckpt
```

Adieu:

```
In [5]: sess.close()
```