# 5. Tensorboard

① From TF graph, decide which tensors you want to log
```
w2_hist = tf.summary.histogram("weights2", W2)
cost_summ = tf.summary.scalar("cost", cost)
```

5 steps of using
TensorBoard

② Merge all summaries
```
summary = tf.summary.merge_all()
```

③ Create writer and add graph
```
# Create summary writer
writer = tf.summary.FileWriter('./logs')
writer.add_graph(sess.graph)
```

④ Run summary merge and add_summary
```
s, _ = sess.run([summary, optimizer], feed_dict=feed_dict)
writer.add_summary(s, global_step=global_step)
```

⑤ Launch TensorBoard
```
tensorboard --logdir=./logs
```

# 무엇을 보고 싶은가

- tf.summary.scalar(name, scalar)

- tf.summary.image(name, image)

- tf.summary.histogram(name, histogram)

## 어디에 기록하고 싶은가

- tf.summary.merge_all()

- tf.summary.merge(summaries)

- tf.summary.FileWriter(log_dir, graph)

## 언제 마다 기록하고 싶은가

- summary = sess.sun(merge)

- writer.add_summary(summary, global_step)

```
python -m tensorboard.main
tensorboard --logdir=./logs
```

1. pip freeze > requirements.txt
2. pip install -r requirements.txt