```
                'sec/batch)')
      print (format_str % (datetime.now(), step, loss_value,
                           examples_per_sec, sec_per_batch))

    if step % 100 == 0:
      summary_str = sess.run(summary_op)
      summary_writer.add_summary(summary_str, step)
    # Save the model checkpoint periodically.

    if step % 1000 == 0 or (step + 1) == FLAGS.max_steps:
      checkpoint_path = os.path.join(FLAGS.train_dir, 'model.ckpt')
      saver.save(sess, checkpoint_path, global_step=step)
```

Challenge for the Reader

You now have all the pieces required to train this model in practice. Try running it on a suitable GPU server! You may want to use tools such as `nvidia-smi` to ensure that all GPUs are actually being used.

Review

In this chapter, you learned about various types of hardware commonly used to train deep architectures. You also learned about data parallel and model parallel designs for training deep architectures on multiple CPUs or GPUs. We ended the chapter by walking through a case study on how to implement data parallel training of convolutional networks in TensorFlow.

In Chapter 10, we will discuss the future of deep learning and how you can use the skills you've learned in this book effectively and ethically.