



We've prepared a Jupyter notebook that will guide you through the process of creating a single layer neural network in TensorFlow. You'll implement data normalization, then build and train the network with TensorFlow.

Getting the notebook

The notebook and all related files are available from [our GitHub repository](#). Either clone the repository or download it as a Zip file.

Use Git to clone the repository.

```
git clone https://github.com/udacity/deep-learning.git
```

If you're unfamiliar with Git and GitHub, I highly recommend checking out [our course](#). If you'd rather not use Git, you can download the repository as a Zip archive. You can find [the repo here](#).

View The Notebook

In the directory with the notebook file, start your Jupyter notebook server

```
jupyter notebook
```

This should open a browser window for you. If it doesn't, go to <http://localhost:8888/tree>. Although, the port number might be different if you have other notebook servers running, so try 8889 instead of 8888 if you can't find the right server.

You should see the notebook `intro_to_tensorflow.ipynb`, this is the notebook you'll be working on. The notebook has 3 problems for you to solve:

- Problem 1: Normalize the features
- Problem 2: Use TensorFlow operations to create features, labels, weight, and biases tensors
- Problem 3: Tune the learning rate, number of steps, and batch size for the best