

## Lab 10 Deep Learning

Good Introduction to Tensorflow notes/slides:

<https://web.stanford.edu/class/cs20si/2017/lectures/>

Code for Logistic Regression:

<https://www.geeksforgeeks.org/ml-logistic-regression-using-tensorflow/>

[https://github.com/aymericdamien/TensorFlow-Examples/blob/master/examples/2\\_BasicModels/logistic\\_regression.py](https://github.com/aymericdamien/TensorFlow-Examples/blob/master/examples/2_BasicModels/logistic_regression.py)

My base code for a simple Neural Network:

<https://colab.research.google.com/drive/1vPMxK3BupxtCUpLyHbgfZ4TBfftBpXT>

Tasks:

- 1) Understand TensorFlow at a high level (tensors, data-flow graphs) and enough to manipulate existing code.
- 2) Change/add to the neural network architecture provided above. Your goal is to increase the test accuracy as much as possible. You should get a better accuracy than the base code by constructing your own neural network. The best 5 test scores in each section will get 5 bonus points.