CSC 421 – Assignment 4

Due date: Dec 5, 11:55 pm.

For this assignment you should complete the posted Python notebook.

To setup follow these steps.

Download the python notebook for this assignment. Put it in the directory of your choice. Also download the following python pickle files:

http://webhome.cs.uvic.ca/~thomo/mnist_nonbin_classification.pickle

http://webhome.cs.uvic.ca/~thomo/mnist_bin_classification_9vsRest.pickle

Put them in the same directory.

After having installed Anaconda and Tensorflow (see below), execute

jupyter notebook

and select assign4_post notebook and do the exercises there.

Installing Anaconda and Tensorflow in Windows

1. Download and install Anaconda 64 bit: https://www.anaconda.com/download

When you install it, please take care to click on the box asking you to include Anaconda in the PATH.

2. Download a precompiled Tensorflow environment: http://webhome.cs.uvic.ca/~thomo/tf.zip

Unzip the file and put it under C:

Your directory will be C:\tf

3. Go to the directory of your choice (where you put the assignment files above). From command line execute: activate C:\tf

Then execute: jupyter notebook as described above.

Installing Anaconda and Tensorflow in Mac

1. Download and install Anaconda 64 bit: https://www.anaconda.com/download

2. Create Conda Environment for tensorflow and activate it

Create Conda Environment named tensorflow:

conda create -n tensorflow

Activate the environment using:

source activate tensorflow

3. Downloand and install Tensorflow:

Download wheeler file for TensorFlow and save it anywhere in you machine:

https://storage.googleapis.com/tensorflow/mac/cpu/tensorflow-1.3.0-py3-none-any.whl

Note the path to this wheeler file, let's call it PATH_TO_FILE here.

Install tensor flow library on the newly created tensorflow environment using:

pip install --ignore-installed --upgrade PATH_TO_FILE

For both platforms.

Check if tensorflow works fine:

From the environment created, launch jupyter notebook:

jupyter notebook

Open a new python3 notebook and try running:

import tensorflow as tf

If the cell runs without any error, you are all set to go!

Remark.

If you have problem with the installation contact Jinghan or Amir (jinghan.j@outlook.com, mehrafsa@live.com)