Deep Learning in Medicine

BMSC-GA 4493, BMIN-GA 3007

Lab 1: PyTorch and Packages Setup

In this lab, we will be walking through the steps to setting up the environment for the course. We would mainly be using PyTorch, a deep learning package for Python, for this class. Please step through the following guidelines.

1. Install Anaconda from https://www.anaconda.com/download/. Select the version for your operating system.
2. For macOS and Linux, open up terminal. For Windows, open Anaconda Prompt from Start.
3. Create a conda environment by (may take a while)
   ```
   >> conda create -n py35 python=3.5 anaconda
   ```
4. Activate the environment
   ```
   >> conda activate py35
   ```
5. Install the required packages using the command:
   ```
   >> conda install <package_name>
   ```
   For the purpose of this course, please install the following packages:
   - numpy
   - pandas
   - scikit-learn
   - scipy
   - matplotlib
   - pytorch
     - **macOS/Linux:** follow the guidelines on http://pytorch.org/. Select your OS, conda, and python version 3.5. Leave the cuda option as 8.
     - **Windows 10:**
       ```
       >> conda install -c peterjc123 pytorch
       ```
     - **Previous Windows versions:**
       ```
       >> conda install -c peterjc123 pytorch_legacy
       ```
6. Open up Jupyter notebook using the command
   ```
   >> jupyter notebook
   ```
   from either your terminal or Anaconda Prompt. Note that Jupyter notebook uses the current directory as the root directory. If you want to specify a root directory, you can use
   ```
   >> jupyter notebook --notebook-dir path/to/directory
   ```
7. Clone repo using git
   ```
   >> git clone https://github.com/nyumc-dl/BMSC-GA-4493-Spring2018.git
   ```
8. Demo on Jupyter notebook