Software Instructions

Natural Language Processing

Python, PyCharm, and Anaconda

Throughout the course, we will use the Python 3.X programming language. You can download Python directly from https://www.python.org/downloads/ and follow the installation instructions.

We will write and run Python code in the PyCharm integrated development environment (IDE). Download PyCharm from https://www.jetbrains.com/pycharm/. Students can obtain the professional edition for free.

I recommend managing Python via Anaconda, which simplifies installation and package management. Download Anaconda from https://www.anaconda.com/download, open the Anaconda Navigator, go to the Environments tab, and create a new Python environment. You can then set this environment as the Python interpreter in PyCharm.

Python libraries

We will use several Python libraries for data science, machine learning, and NLP, including `numpy, pandas, re, scikit-learn, torch, transformers`, among others. If you are using an Anaconda environment:

1. In Anaconda Navigator, click the play button next to your environment and select Open Terminal, then run:

    ```
    pip install packagename
    ```

2. Alternatively, in your operating system's terminal, run:

    ```
    conda activate environment_name
    pip install packagename
    ```