Software Installations Seth D Temple December 14, 2021

This document includes instructions to install necessary programs for text data analysis. The procedure below assumes that the client does not have Python (Anaconda distribution) installed *a priori*. Existing versions of Python, Anaconda, and GitHub may expedite this process.

- 1. Install the individual edition of Anaconda (<u>link</u>) appropriate for your operating system. This software is a distribution manager for the Python and R programming languages. Use the most recent version of Python. Further instructions are documented <u>here</u>.
- 2. Open the software Anaconda Prompt (or some other terminal/console that has conda). Install the following Python libraries for machine learning (ML) and natural language processing (NLP). Many of these may be pre-installed with the distribution. Use the terminal commands below. If you run into issues, you may consider commands of this flavor: pip install [library]. Otherwise, search StackExchange or StackOverflow for help.
 - a. conda install numpy
 - b. conda install pandas
 - c. conda install matplotlib
 - d. conda install sklearn
 - e. conda install nltk
 - f. conda install -c conda-forge gensim
 - g. conda install -c conda-forge textblob
 - h. conda install -c conda-forge wordcloud
- 3. Download NLTK data in Python through the terminal/console. In the terminal/console (e.g. Anaconda Prompt), type and Enter the following commands:
 - a. python
 - b. import nltk, gensim
 - c. nltk.download('wordnet')
 - d. nltk.download('stopwords')
- 4. (Optional) You could consider the following downloads of NLTK data from the terminal/console if you run into issues later on.
 - a. python -m nltk.downloader popular
 - b. python -m textblob.download corpora
 - c. python -m textblob.download corpora lite
- 5. Visit the GitHub repository and download it (Green button saying 'Code'). Either download as a zipper folder and unzip, or use the <u>GitHub Desktop</u> app. Make sure to have the folder 'coilnlp' with the accompanying code files in a folder where you plan to perform the text data analysis.
- 6. Advice: when downloading packages and data from the terminal/console, parse the print output to ensure no errors. After importing the 'coilnlp' package in a Python session or IPython notebook, use help(function_name) to see documentation. Please reach out to sdtemple@uw.edu if you run into other issues.