

The instructions below apply to both lectures delivered by Rachele Sprugnoli, namely “Natural Language Processing” and “Tools for text analysis and visualization”

Instructions are given to install tools that will be used in two lessons/laboratories during the Summer School “DIGITAL TOOLS FOR HUMANISTS” 2018 in Pisa. Below we give details for installing on Windows and Mac laptops. In case you use Linux, please write an email to sprugnoli@fbk.eu with information about the distribution you use (e.g. Debian, Ubuntu). Write to the same address for any problem encountered in the installation on Windows or Mac.

1. Natural Language Processing

1.1 Stanford CoreNLP

The Stanford Core NLP requires a running Java 8 installation. To check the version of Java already installed on your laptop:

Windows:

- launch the command prompt via *All Programs -> Accessories -> Command Prompt* (in Italian -> Prompt dei comandi) and then type the command: `java -version`

Mac:

- launch the *Terminal* window
- type the following in the *Terminal* window: `java -version`

If you don't have Java installed, the message “command not found” appears on the terminal otherwise the version of Java is displayed (e.g. java version "7.0.4").

It might also show something like: “java version “1.8.0_171”, where version is the second number.

If you have a version of Java < 8 (or <1.8) you need to install Java from scratch:

Windows:

- go to <http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html>
- select the option “Accept License Agreement” for *Java SE Runtime Environment 8u171*
- download **jre-8u171-windows-x64.exe**
- run the program and follow the instructions

Mac:

- go to <http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html>
- select the option “Accept License Agreement” for *Java SE Runtime Environment 8u171*
- download **jre-8u171-macosx-x64.dmg**
- open the dmg file and click on the icon to start the installation

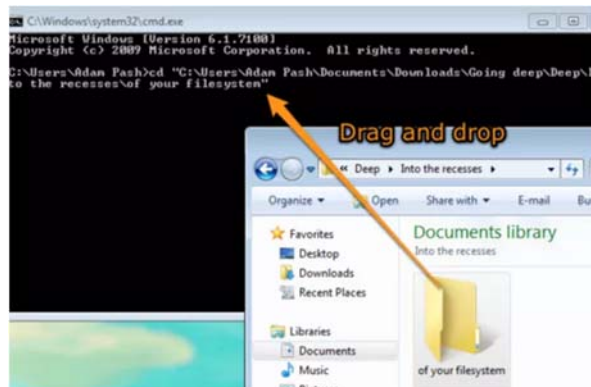
Once Java 8 is installed, download the zip file containing CoreNLP here:

<http://nlp.stanford.edu/software/stanford-corenlp-full-2018-02-27.zip>

Unzip the zip file in a folder of your choice.

Try if the installation went well:

- launch the command prompt on **Windows** via *All Programs -> Accessories -> Command Prompt* or the *Terminal* on **Mac**
- type the command `cd` and then the location of the folder of CoreNLP. To add the path of the folder, drag and drop that folder into your command prompt



- type the following command:

```
echo "hello world!" | java -mx3g -cp "./*"
edu.stanford.nlp.pipeline.StanfordCoreNLP -annotators
"tokenize,ssplit,pos,lemma" -outputFormat conll
```

If CoreNLP has been installed correctly, the following output should appear after few seconds:

```
1   hello    hello    UH      _      _      _
2   world    world    NN      _      _      _
3   !        !        .       _      _      _
```

1.2 Topic-modeling-tool

- Download: <https://storage.googleapis.com/google-code-archive-downloads/v2/code.google.com/topic-modeling-tool/TopicModelingTool.jar>
- Double-click the downloaded file to run it. If double-clicking does not run the application, you may need to install Java on your machine. Please follow the instructions given for installing Java for running CoreNLP.

2. Tools for text analysis and visualization

2. GEPHI

Install Gephi following the instructions detailed here: <https://gephi.org/users/install/>