# INSTALLATION GUIDES [FOR WINDOWS 10]

Text Analytics in the Digital Humanities (FS 22)

PD Dr. Gerold Schneider

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- I. Please visit
  <a href="https://stat.ethz.ch/CRAN/">https://stat.ethz.ch/CRAN/</a>
  bin/windows/base/
- 2. Download "R 4.1.2 for Windows"
- 3. Install the program

https://stat.ethz.ch/CRAN/

R-4.1.2 for Windows (32/64 bit)

Installation and other instructions
New features in this version

If you want to double-check that the package you have downloaded matches the package distributed by CRAN, you can compare the server. You will need a version of md5sum for windows: both graphical and command line versions are available.

Frequently asked questions

- Does R run under my version of Windows?
- How do I update packages in my previous version of R?

Download R 4.1.2 for Windows (86 megabytes, 32/64 bit)

Should I run 32-bit or 64-bit R?

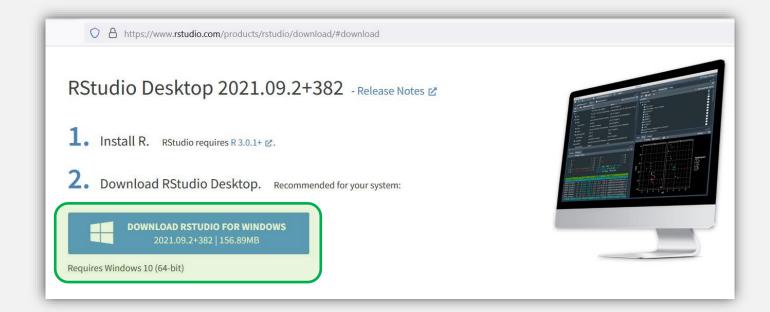
Please see the R FAQ for general information about R and the R Windows FAQ for Windows-specific information.

Other builds

#### R & RSTUDIO

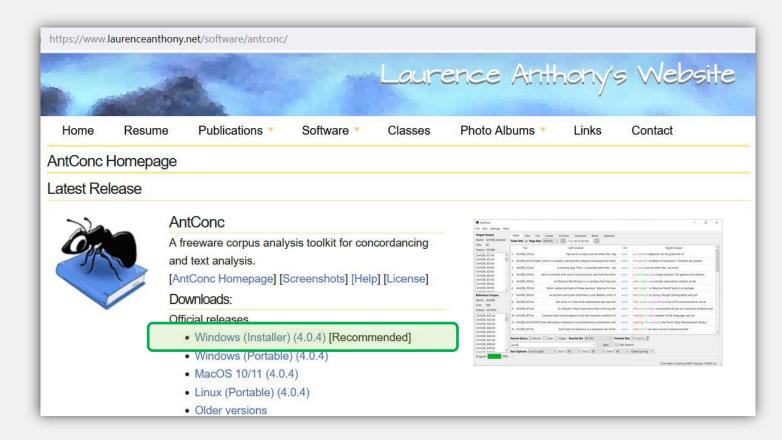
2/2

- I. Then go to <a href="https://www.rstudio.com/products/">https://www.rstudio.com/products/</a> <a href="retroited-r
- 2. Download "RStudio Desktop" (RStudio-2021.09.2-382)
- 3. Install the program



#### **ANTCONC**

- 1. Please visit <a href="https://www.laurenceanthony.net/">https://www.laurenceanthony.net/<a href="https://www.laurenceanthony.net/">https://www.laurenceanthony.net/</a>
- Download
   "Windows (Installer) (4.0.4)
   [Recommended]"
- 3. Install the program



#### LIGHTSIDE

1/10

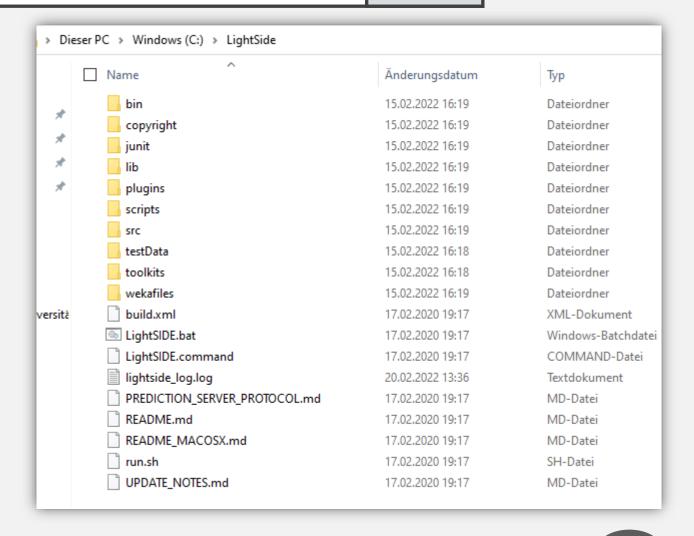
- I. Please visit
  <a href="http://ankara.lti.cs.cmu.edu/side/">http://ankara.lti.cs.cmu.edu/side/</a>
- Download
   "LightSide" (By the way, you can
   download the program without entering
   your name, etc.)
- 3. Install the program



#### LIGHTSIDE

2/10

- I. Create a folder called "LightSide" in your C drive (C:\)
- 2. Unzip "LightSide.zip"
- Now move the content of the "LightSide" folder directly to C:\LightSide



- I. Since LightSide uses Java, we now need to make sure that you have Java installed on your computer.
- 2. To do this, open your Command Prompt (Terminal): + "cmd", + "terminal", etc.
- 3. Then type "java -version" and hit Enter.
- 4. If you don't have Java yet, you will get a response similar to the one showed in the upper right.

If Java is already installed, the particular version will be listed (cf. the 2<sup>nd</sup> screenshot).

Command Prompt

Microsoft Windows [Version 10.0.19042.1526]

(c) Microsoft Corporation. All rights reserved.

C:\Users\prisi>java -version
'java' is not recognized as an internal or external command, operable program or batch file.

C:\Users\prisi>

Command Prompt

Microsoft Windows [Version 10.0.19042.1526]

(c) Microsoft Corporation. All rights reserved.

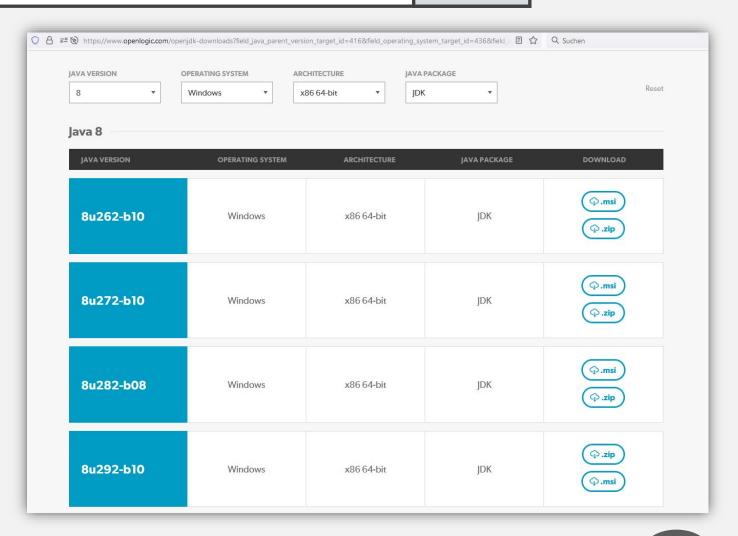
C:\Users\prisi>java -version
openjdk version "1.8.0\_322"

OpenJDK Runtime Environment (Temurin)(build 1.8.0\_322-b06)
OpenJDK 64-Bit Server VM (Temurin)(build 25.322-b06, mixed mode)

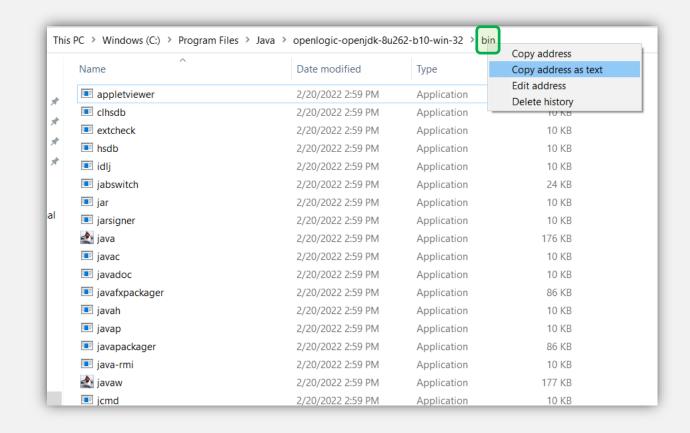
C:\Users\prisi>

- Chances are we will have to (re)install Java either way because LightSide requires an older version of Java.
- 2. We recommend installing the Java development kit (JDK) version 8 (which is sometimes called "1.8", too).
- 3. OpenLogic provides and supports free distributions of OpenJDK 8:

https://www.openlogic.com/openjdk -downloads



- I. After the download, you can move the unzipped folder to the location you wish to store it (we've chosen "C:\Program Files\Java").
- 2. We then need to find the subfolder called "bin" and copy its exact path or "address".
  - → You can copy the address by rightclicking on "bin" in the path at the top of the window, as shown to the right.

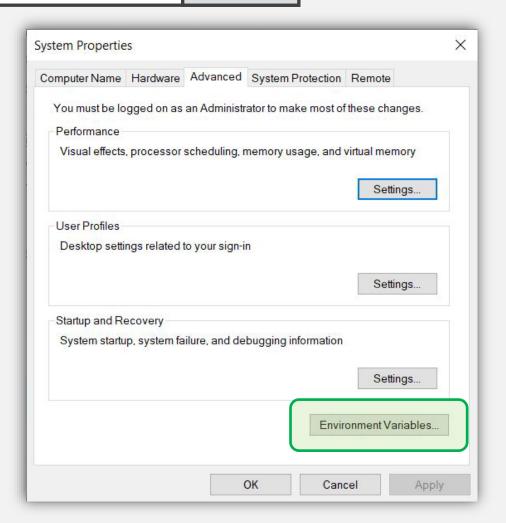


I. Go to your Environment Variables:

**System Properties** 

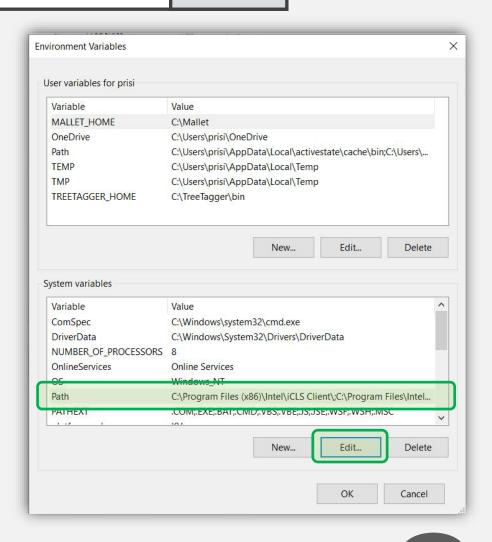
- → Advanced
- → Environment Variables...

(or just **##** + "environment variables")



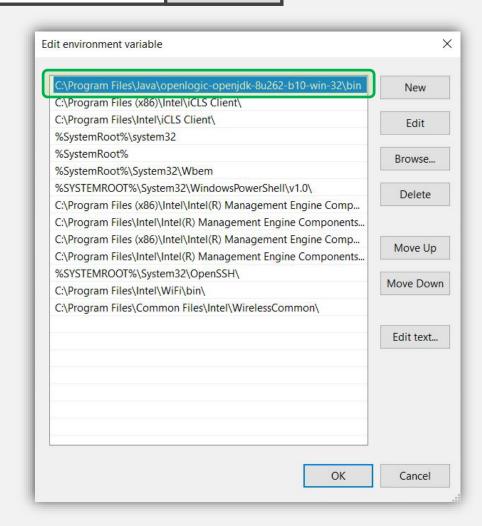
Silvio Liesch

I. Look for "Path" in the list of "System variables" and click "Edit...".



Silvio Liesch

- I. Create a new environment variable by clicking on "New" and paste the address of the "bin" subfolder we've copied earlier on.
- 2. Make sure the new environment variable is at the very top of the list (use the "Move Up" button).
- 3. (Alternatively, you can click on "Edit text..." and paste your address at the beginning of this long single line. Please note that a semicolon must be set at the end of the path to mark the boundary to the next path.)



I. To see if everything has worked out, you can now check again in your Command Prompt and type "java -version".

```
Command Prompt

Microsoft Windows [Version 10.0.19042.1526]

(c) Microsoft Corporation. All rights reserved.

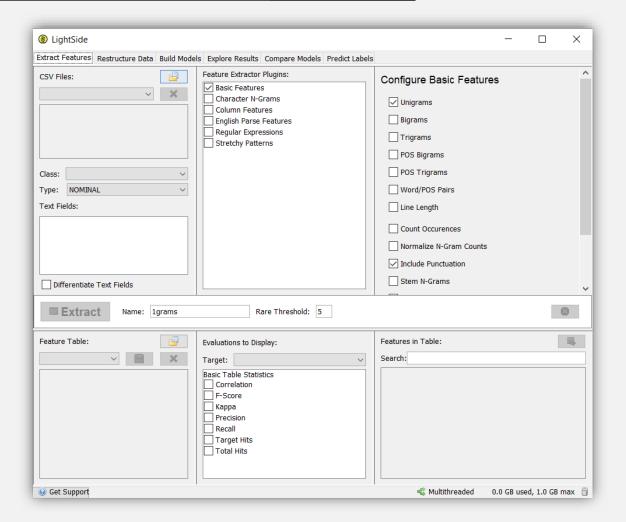
C:\Users\prisi>java -version
openjdk version "1.8.0-262"

OpenJDK Runtime Environment (build 1.8.0-262-b10)

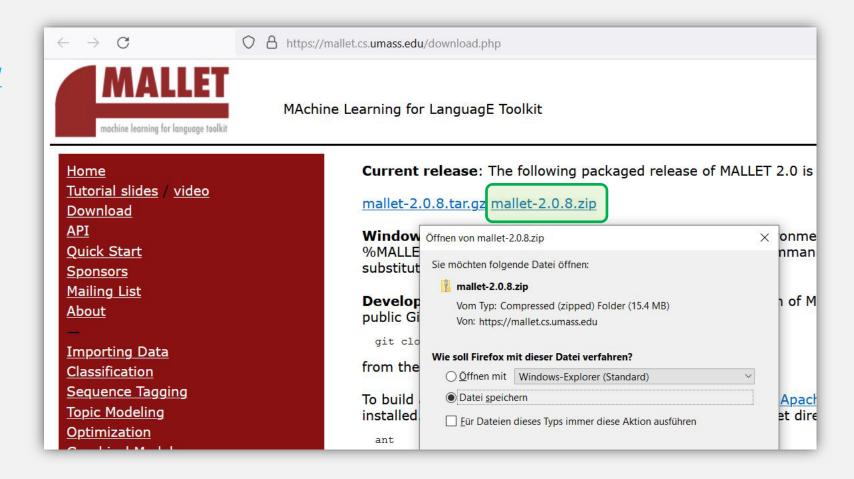
OpenJDK Server VM (build 25.71-b10, mixed mode)

C:\Users\prisi>
```

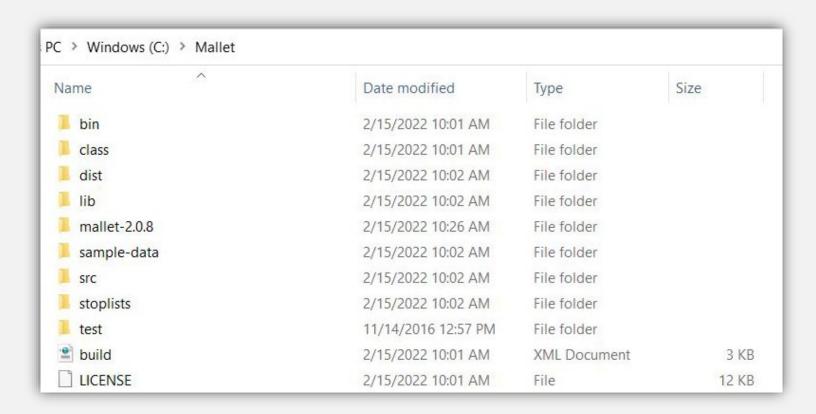
I. After we have successfully installed Java, we can finally start LightSide by clicking the "LightSIDE.bat" file in your LightSide folder.



- Please visit<a href="https://mallet.cs.umass.edu/download.php">https://mallet.cs.umass.edu/download.php</a>
- Download "mallet-2.0.8.zip"



- I. Create a folder called "Mallet" in your C drive (C:\)
- 2. Unzip "mallet-2.0.8.zip"
- Now move the content of "mallet-2.0.8" directly to C:\Mallet

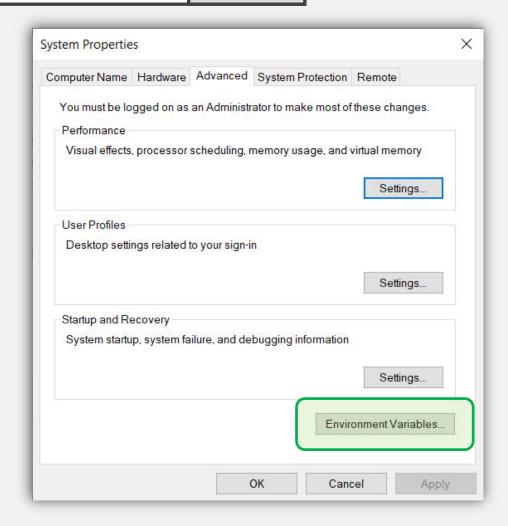


. Go to your Environment Variables:

**System Properties** 

- → Advanced
- → Environment Variables...

(or just ■ + "environment variables")



Silvio Liesch

- . Add a new Environment Variable:
- 2. Name the variable "MALLET\_HOME"

New User Variable

Variable name:

Variable value:

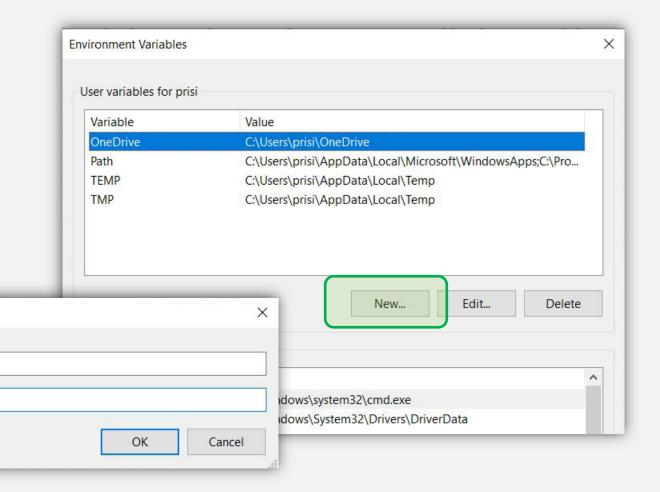
Browse Directory...

MALLET\_HOME

Browse File...

C:\Mallet

3. Set its value to "C:\Mallet"



- I. Open your Command Prompt (Terminal)(圖 + "cmd", 圖 + "terminal", etc.)
- 2. Type "cd .." and hit Enter until you reach your C:
  - → "cd" means "change directory", while "cd .." moves down one level of the directory tree
- 3. Then type "cd mallet" in order to get to Mallet's directory

```
Eingabeaufforderung — — X

Microsoft Windows [Version 10.0.18363.2039]
(c) 2019 Microsoft Corporation. Alle Rechte vorbehalten.

C:\Users\sliesc>cd ..

C:\Users>cd ..
```

```
Eingabeaufforderung — X

Microsoft Windows [Version 10.0.18363.2039]
(c) 2019 Microsoft Corporation. Alle Rechte vorbehalten.

C:\Users\sliesc>cd ..

C:\Users>cd ..

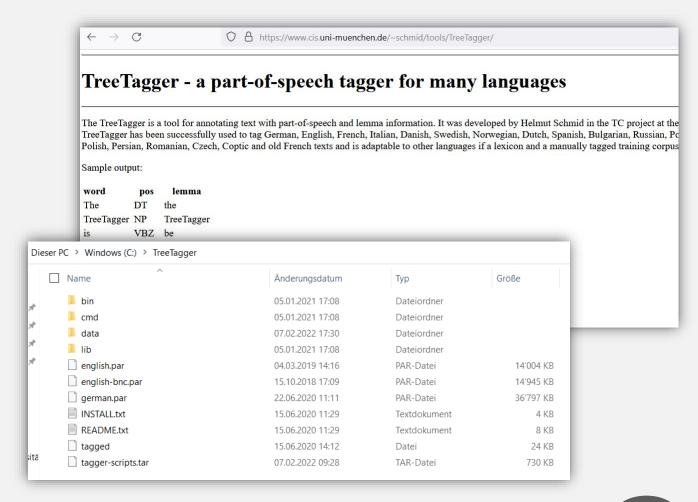
C:\>cd mallet

C:\Mallet>
```

- Add "bin\mallet" to the code line (C:\Mallet>bin\mallet)
- 2. You should now see a list of all the commands for Mallet.
  - → If this is the case, the program is installed properly.

```
Eingabeaufforderung
                                                                                          Microsoft Windows [Version 10.0.18363.2039]
(c) 2019 Microsoft Corporation. Alle Rechte vorbehalten.
C:\Users\sliesc>cd ..
C:\Users>cd ...
C:\>cd mallet
 :\Mallet>bin\mallet
 Mallet 2.0 commands:
                    load the contents of a directory into mallet instances (one per file)
  import-dir
  import-file
                    load a single file into mallet instances (one per line)
                   load a single SVMLight format data file into mallet instances (one per line)
  import-symlight
                    get information about Mallet instances
  info
  train-classifier train a classifier from Mallet data files
                    classify data from a single file with a saved classifier
  classify-dir
  classify-file
                    classify the contents of a directory with a saved classifier
  classify-symlight classify data from a single file in SVMLight format
                    train a topic model from Mallet data files
  train-topics
  infer-topics
                    use a trained topic model to infer topics for new documents
                   estimate the probability of new documents given a trained model
  evaluate-topics
                    remove features based on frequency or information gain
  prune
                    divide data into testing, training, and validation portions
  split
                    for big input files, efficiently prune vocabulary and import docs
  bulk-load
Include --help with any option for more information
C:\Mallet>
```

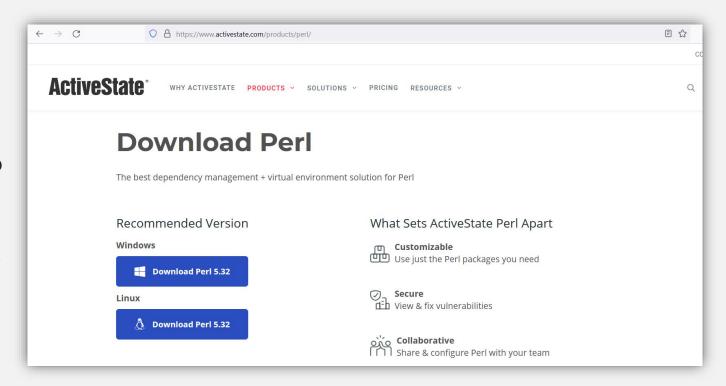
- I. Please visit
  <a href="https://www.cis.uni-muenchen.de/~schmid/tools/TreeTagger/">https://www.cis.uni-muenchen.de/~schmid/tools/</a>
  TreeTagger/
- 2. Scroll down and download the Windows version.
- 3. Create a folder called "TreeTagger" in your root directory (C:\) and move the content of the extracted zip file there.



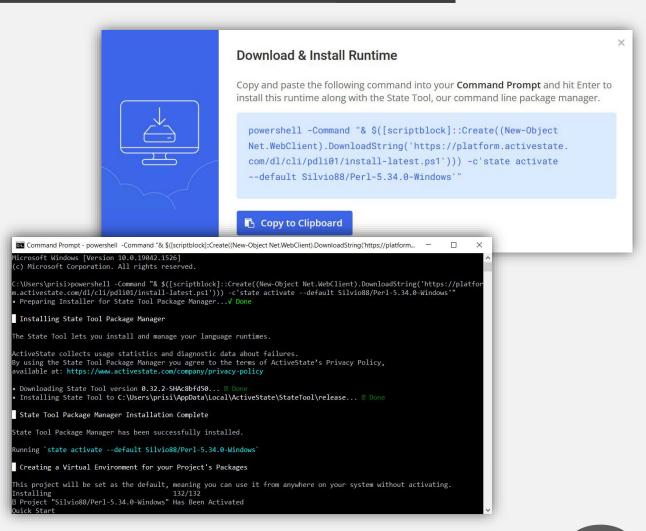
- I. In order to use TreeTagger, we need to install a Perl interpreter first.
- 2. You can download Perl at ActiveState (where you have to register or sign up with an existing GitHub account):

https://www.activestate.com/products/perl/

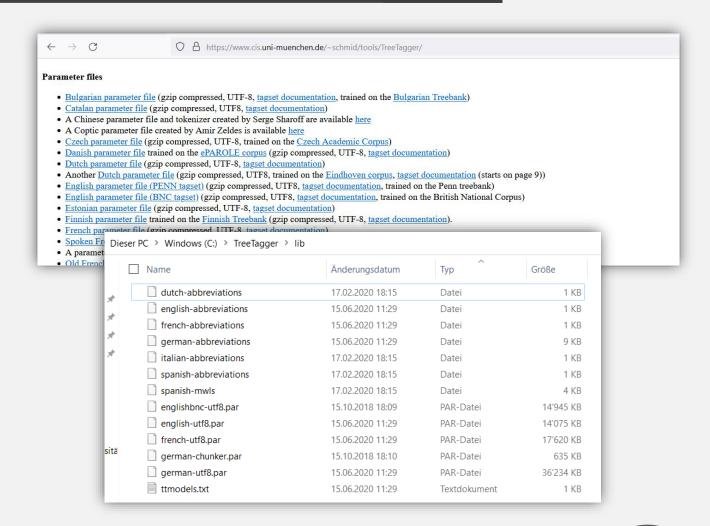
3. Download Perl (either in the 5.32 or 5.34 version).



- You then receive a command: Copy it and then paste it in your Command Prompt.
- 2. This will start the installation of Perl on your computer by creating a project linked to your account.



- I. Go back to the TreeTagger website and download the parameter files for the language(s) you need.
- Decompress these files (e.g. using 7zip) and move them to the subdirectory "lib" (C:\TreeTagger\lib).
- 3. Rename the parameter files to <a href="language"><a href="language"
  - → e.g. "english-utf8.par"

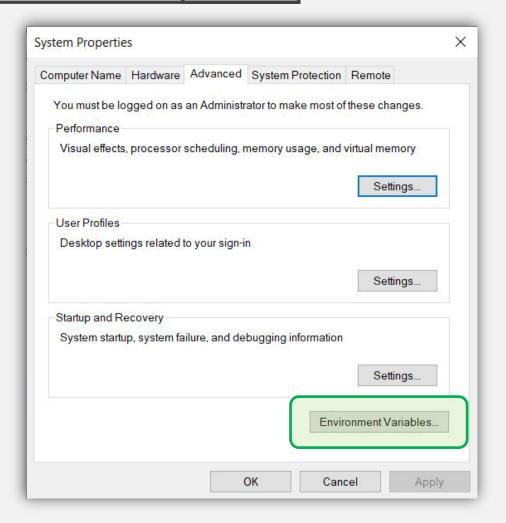


. Go to your Environment Variables:

**System Properties** 

- → Advanced
- → Environment Variables...

(or just ■ + "environment variables")



- I. Add a new Environment Variable:
- Name the variable "TREETAGGER\_HOME"
- 3. Set its value to "C:\TreeTagger\bin"

New User Variable

Variable name:

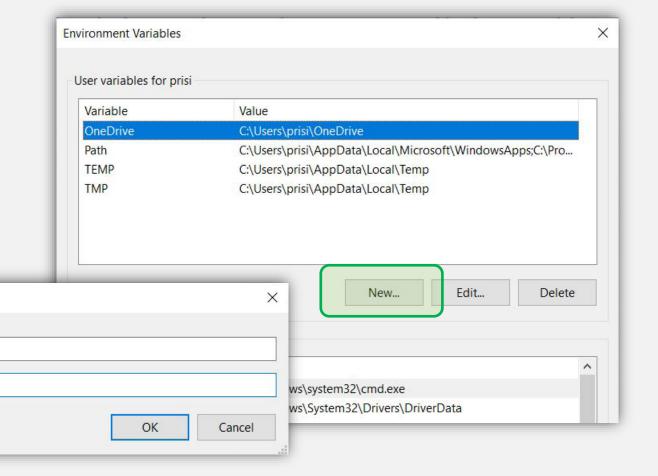
Variable value:

Browse Directory...

TREETAGGER\_HOME

C:\TreeTagger\bin

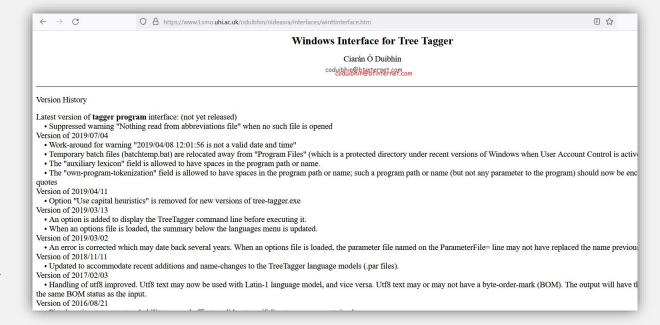
Browse File...



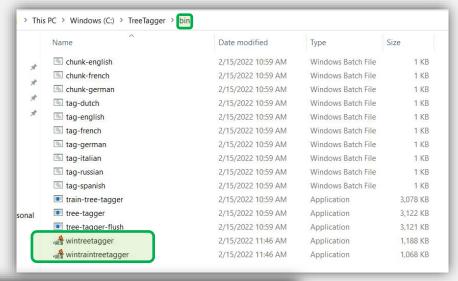
I. TreeTagger is mostly used in the command prompt itself. Fortunately, there is a very useful and well-arranged interface for Windows (created by Ciarán Ó Duibhín).

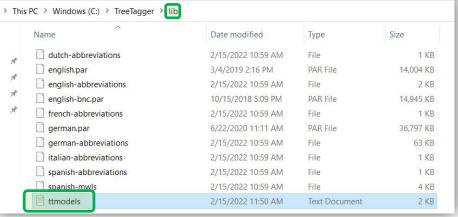
You can download it from this website:

http://www3.smo.uhi.ac.uk/oduibhin/oide asra/interfaces/winttinterface.htm

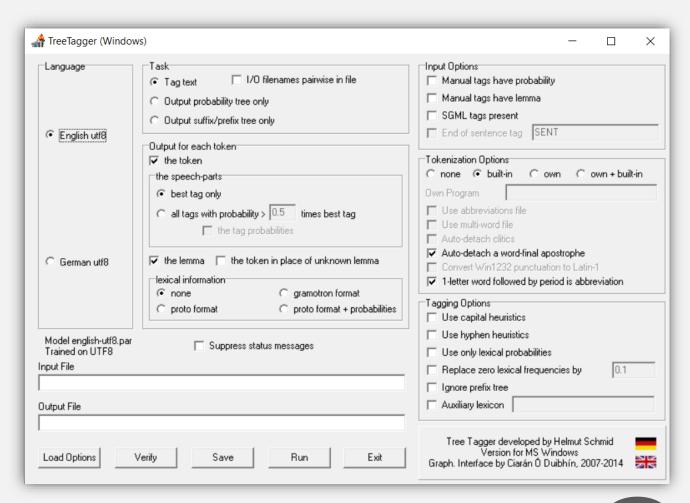


- 1. Now move the two application files "wintreetagger.exe" and "wintraintreetagger.exe" to the \bin subdirectory (alongside the two original application files called "tree-tagger.exe" and "train-tree-tagger.exe").
- 2. Also, place the textfile "ttmodels.txt" in the \lib subdirectory (where you find the language model files).



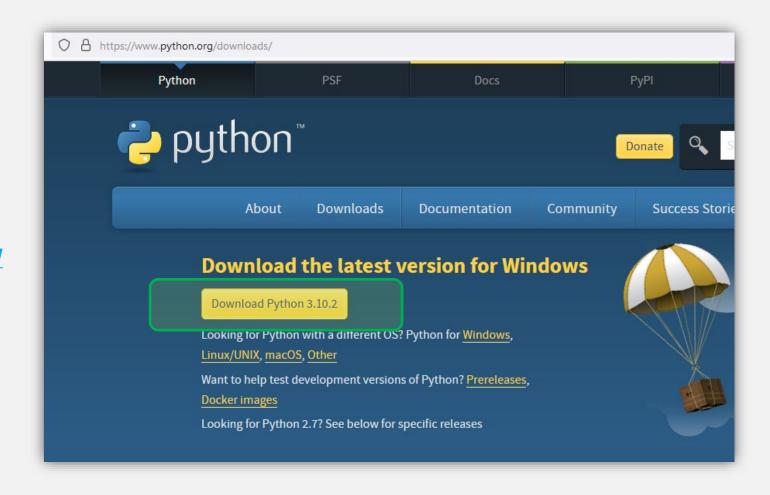


I. You can now launch the interface by opening "wintreetagger.exe".



#### 1. Textplot is a library within Python.

- → If Python is not yet installed on your computer, we need to download that one first:
- 2. Please visit <a href="https://www.python.org/downloads/">https://www.python.org/downloads/</a>
- 3. Download "Python 3.10.2"



- Start installing Python
- 2. Tick the box "Add Python 3.10 to PATH"



- I. After having installed Python, you can install the Textplot library like a standard Python library (via the package installer "pip").
- 2. To do this, open your Command Prompt and type the following:

"pip install textplot"

3. Textplot is being installed now.

If you prefer a manual installation, you can also get Textplot from GitHub: <a href="https://github.com/davidmcclure/textplot">https://github.com/davidmcclure/textplot</a>

```
Eingabeaufforderung - pip install textplot
Microsoft Windows [Version 10.0.19043.1526]
(c) Microsoft Corporation. Alle Rechte vorbehalten.
::\Users\Silvio>pip install textplot
Collecting textplot
 Downloading textplot-0.1.1.tar.gz (7.3 kB)
Collecting scikit-learn
 Downloading scikit_learn-1.0.2-cp310-cp310-win_amd64.whl (7.2 MB)
                                        7.2 MB 3.2 MB/s
Collecting numpy
 Downloading numpy-1.22.2-cp310-cp310-win_amd64.whl (14.7 MB)
                                        14.7 MB 6.4 MB/s
Collecting scipy
 Downloading scipy-1.8.0-cp310-cp310-win amd64.whl (37.0 MB)
                                        37.0 MB 160 kB/s
Collecting matplotlib
 Downloading matplotlib-3.5.1-cp310-cp310-win amd64.whl (7.2 MB)
                                        7.2 MB ...
Collecting nltk
 Downloading nltk-3.7-py3-none-any.whl (1.5 MB)
                                        1.5 MB ...
Collecting networkx
 Downloading networkx-2.6.3-py3-none-any.whl (1.9 MB)
                                        1.9 MB 6.4 MB/s
Collecting clint
```

### **GEPHI**

- Please visit<a href="https://gephi.org/">https://gephi.org/</a>
- 2. Download «Gephi 0.9.2»
- 3. Install the program

