

Installation Instructions: Maschinelles Lernen lernen

Should any of the steps listed below cause problems, which can not be solved, just send an e-mail with the description of the problem (possibly including error messages, etc.) to the following e-mail address: `nils.reiter@ims.uni-stuttgart.de`. We will try to find a solution together.

The guide is divided into sections for Windows 10, MacOS and Linux. The instructions assume that there is no previous version of Python (or an installation attempt). If that is the case, unforeseen problems can occur.

The commands given in `Typewriter` must be entered exactly like this, including white space and quotation marks.

Windows 10

Installation

1. **Python.** If another Python version is already installed, it can be used (if it is 2.7 or newer). Depending on the version, `py` or `python` must always be entered to call Python.
- Install Python from <https://www.python.org/downloads/windows/>, preferably with the *Windows x86 executable installer*.
 - **Important:** In the installation wizard, switch on the option “Add to PATH” and select the variant in which *pip* is also installed.
 - Test if Python is installed: Open the command prompt (s.u.) using the Windows icon by typing in “Command Prompt”: `py`
 - Python close with `quit()`
1. Python libraries **NLTK and requests**
 - open command prompt
 - Installation: `py -m pip install nltk requests`
 - Test if the libraries are installed:
 - At the prompt, open Python, type in: `py`

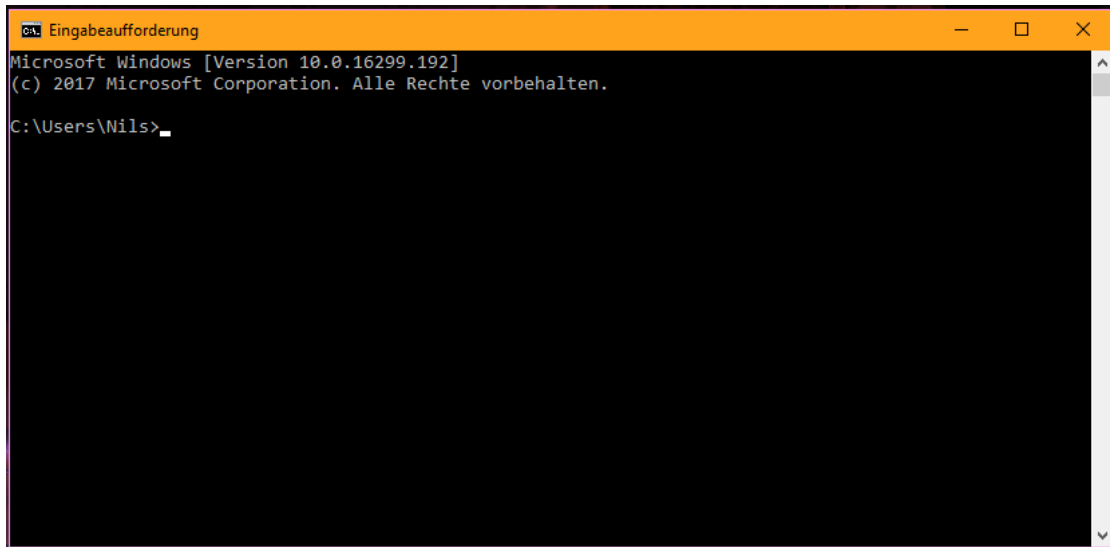
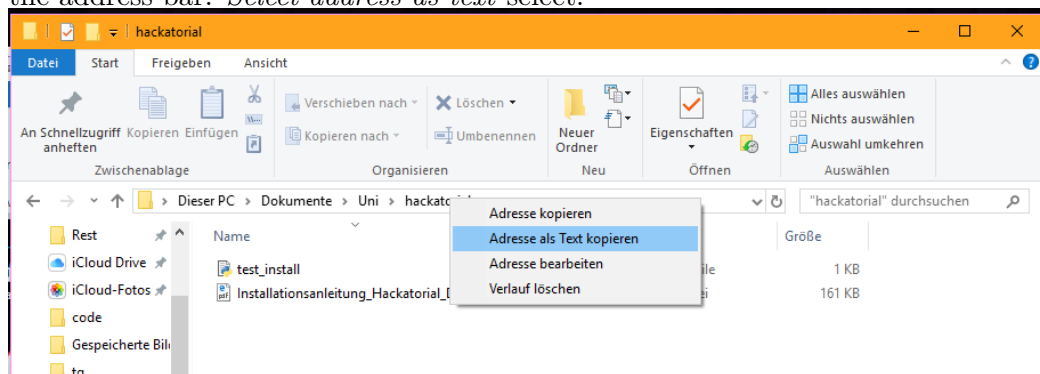


Figure 1: Command Prompt on Windows

- then type in: `import nltk`
- if no error message appears, NLTK is successfully installed
- then type in: `import requests`
- if no error message appears, requests is successfully installed
- Close Python: `quit()`

test run

- The Python script `test_install.py` can be found on the moodle page in the Hackatorial folder (code)
- Navigate in the directory in the Windows Explorer and call the context menu in the address bar. *Select address as text* select.



- Open the command prompt, enter `cd` and a space, then insert the path via `Ctrl-v`.

Press Enter.

- Start test run: `py test_install.py`
- If the script prints “Installation successful”, the installation was successful.

MacOS-Anleitung

Installation

1. Python

- If another Python version is already installed, it can be used. Under MacOS 10.13 Python 2.7 is preinstalled, with this you can work in the tutorial.

2. Pip

- open the terminal
- enter `sudo easy_install pip` (installed pip)
- check for updates (even with new installation): `sudo pip install --upgrade pip`

3. NLTK

- Open the terminal, type in the NLTK installation: `sudo pip install nltk`
- Test if NLTK is installed:
 - Open via terminal Python: `python`
 - then type in: `import nltk`
 - if no error message appears, NLTK is successfully installed
 - Python close: `quit ()`

4. requests

- Open “Terminal”, type in for requests installation: `sudo pip install requests`
- Test if requests is installed:
 - Open via terminal Python: `python`
 - then type in: `import requests`
 - if no error message appears, requests is successfully installed
- Close Python: `quit()`

Script test run

- The Python script `test_install.py` can be found on the moodle page in the Hackatorial folder (code)
- Open the terminal, navigate to the “hackatorial” folder: `cd /Users/Nora/Desktop/hackatorial/` (adapt the path, depending on where the folder is stored).
- Start test run: `py test_install.py`
- If the script prints “Installation successful”, the installation was successful.

Linux (Ubuntu / Debian)

Installation

1. **Python** If another Python version is already installed, this one can be used. Under Linux, Python is usually 2.7 or 3.5.x preinstalled, with these versions the tutorial works.
 - If no Python version is installed, install a version depending on the distribution.
- Test if Python is installed:
 - Open the program *Terminal*, type in: `python3` or `python`
 - Python close with `quit()`
 - When Python 3.x has been installed, the following `pip` commands must be executed with `pip3`!
1. **Pip**
 - open the terminal
 - Depending on the distribution, install the package `python-pip`.
 - Ubuntu / Debian: `su install apt install python-pip` (install pip; root password required) or
 - Ubuntu / Debian: `sudo apt install python-pip` enter (installed pip; user password required ¹)
 - check for updates (even with new installation): `pip install --upgrade pip`
2. Python libraries **NLTK** and **requests**
 - open the terminal (for example `gnome-terminal`, `konsole`, `xterm`, `guake`, ...)
 - `su pip install nltk requests /sudo pip install nltk requests`
 - Test if installation was successful:
 - Open via terminal Python: `python`
 - then type in: `import nltk`
 - then type in: `import requests`
 - if no error message appears, NLTK is successfully installed
 - Python close: `quit ()`

Script test run

- The Python script `test_install.py` can be found on the moodle page in the Hackatorial folder (code)
- Open the terminal, navigate to the “hackatorial” folder:
`cd /home/nora/desktop/hackatorial/` (adjust path, depending on where the folder is stored).
- Start test run: `py test_install.py`
- If the script prints “Installation successful”, the Installation successful.

¹This only works if the user is in the so-called `sudoers`-file. If you do not have administrator rights for the computer, it's best to talk to the administrator who has them.