

Natural Language Processing with Python

CS372 2021 Spring

Installing Python and NLTK for Windows

By CS372 Teaching Staff March 2, 2021

In this document, we will show how to install Python and NLTK via [Chocolatey](#).

1. Install with powershell.exe.

- Ensure that you always use an administrative shell for Chocolatey.
- With PowerShell, you must ensure that Get-ExecutionPolicy is not Restricted.

Run the following command:

```
> Get-ExecutionPolicy
```

If it returns 'Restricted', then run

```
> Set-ExecutionPolicy AllSigned
```

or

```
> Set-ExecutionPolicy Bypass -Scope Process
```

- Input the following command:

```
> Set-ExecutionPolicy Bypass -Scope Process -Force;
```

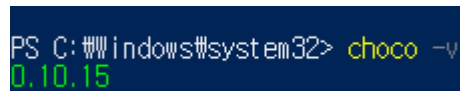
```
[System.Net.ServicePointManager]::SecurityProtocol =
```

```
[System.Net.ServicePointManager]::SecurityProtocol -bor 3072; iex ((New-Object  
System.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1'))
```

- To see if Chocolatey is installed successfully, input the following command:

```
> choco -v
```

(This is the command for checking Chocolatey's version.)



```
PS C:\Windows\system32> choco -v  
0.10.15
```

Figure 1. Version check for Chocolatey

2. Install Python3 with the following command:

```
> choco install python
```

```
...
```

```
Proceed ([y]/n)? y
```

3. All supported versions of Python 3 include pip, so just make sure it's up to date:

```
> python -m pip install -U pip
```

4. Input the following command:

```
> pip install nltk  
> pip install numpy  
> pip install matplotlib
```

5. Input the following commands:

```
> python  
>>> import nltk  
>>> nltk.download()
```

```
PS C:\Windows\system32> python  
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 23:03:10) [MSC v.1916 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license" for more information.  
>>> import nltk  
>>> nltk.download()  
showing info https://raw.githubusercontent.com/nltk/nltk_data/gh-pages/index.xml
```

Figure 2. Commands for NLTK installation

6. Click 'all' and download NLTK collections.

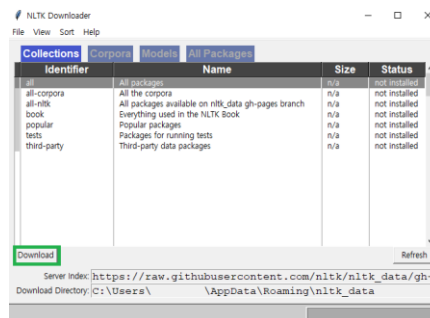


Figure 3. NLTK collection download page

7. (Optional) For installing pipenv, input the following commands:

```
> pip install pipenv
```

8. (Optional) To activate pipenv, input the following command:

```
> pipenv shell
```

9. (Optional) To install 'numpy' and 'matplotlib' library, input the following command:

```
> pipenv install numpy  
> pipenv install matplotlib
```

```
PS C:\Windows\system32> pipenv install numpy
Installing numpy...
Adding numpy to Pipfile's [packages]...
Installation Succeeded
Pipfile.lock not found, creating...
Locking [dev-packages] dependencies...
Locking [packages] dependencies...
success!
Updated Pipfile.lock (456e4b)!
Installing dependencies from Pipfile.lock (456e4b)...
===== 1/1 - 00:00:01
To activate this project's virtualenv, run pipenv shell.
Alternatively, run a command inside the virtualenv with pipenv run.
PS C:\Windows\system32> █
```

Figure 4. Installing numpy with pipenv

10. (Optional) To deactivate and quit pipenv, input the following command:

```
> exit
```