

Python Packages Cheat Sheet

List of Popular Packages

Overview

If you are using Anaconda to manage your Python packages, for any of the following packages that need to be installed, copy the code to install into the Anaconda Prompt. When prompted, enter **y** to confirm yes to continue. Most of the packages should be pre-installed with a core installation of Anaconda; however, the ones highlighted in the summary table will most likely not be installed with a fresh installation of Anaconda. For a list of all packages that are pre-installed with a new installation of Anaconda please see: <https://docs.anaconda.com/anaconda/packages/pkg-docs/>

```
(newBase) C:\Users\bogda>conda install -c conda-forge tabula-py
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\Users\bogda\Anaconda3\envs\newBase

  added / updated specs:
    - tabula-py

The following packages will be downloaded:

package | build | size | channel
-----|-----|-----|-----
openjdk-11.0.8 | 0 | 167.3 MB | conda-forge
tabula-py-1.4.1 | py38h32f6830_2 | 10.0 MB | conda-forge
-----|-----|-----|-----
Total: | | 177.3 MB |

The following NEW packages will be INSTALLED:

openjdk | conda-forge/win-64::openjdk-11.0.8-0
tabula-py | conda-forge/win-64::tabula-py-1.4.1-py38h32f6830_2
vs2013_runtime | pkgs/main/win-64::vs2013_runtime-12.0.21005-1

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

Popular Packages

In the next two pages we have summarized 25 of the top Python packages used by business professionals that are also taught in the various Python courses at TTS. The packages are listed in alphabetical order in the summary tables and also by usage category below:

- Data manipulation : Numpy; Pandas
- Web scraping : BeautifulSoup; Requests; Selenium; Urllib3
- Visualization : Bokeh; Matplotlib; Plotly; Seaborn
- Dashboarding : Dash; Streamlit
- Statistical analysis : SciPy; Statsmodels
- File management: Camelot; OS; Pathlib; Pillow; Shutil; Tabula
- Machine learning: NLTK; OpenCv ; PyTesseract; Scikit-learn; SpaCy

Python Packages Cheat Sheet

List of Popular Packages

Package Name	Conda Code to Install	Category	Additional Information
beautifulsoup4	<code>conda install -c anaconda beautifulsoup4</code> Should already come preinstalled with Anaconda	Web Scraping	Links: https://www.crummy.com/software/BeautifulSoup/bs4/doc/ https://anaconda.org/anaconda/beautifulsoup4
bokeh	<code>conda install -c bokeh bokeh</code> Should already come preinstalled with Anaconda	Visualization	Links: https://docs.bokeh.org/en/latest/index.html https://anaconda.org/bokeh/bokeh
camelot-py	<code>conda install -c conda-forge camelot-py</code>	File Manipulation (reading PDF files)	Links: https://camelot-py.readthedocs.io/ https://anaconda.org/conda-forge/camelot-py Note: Tkinter and Ghostscript applications are also needed for more advanced uses of Camelot. Instructions on installing them can be found here: https://camelot-py.readthedocs.io/en/master/user/install-deps.html
dash	<code>conda install -c conda-forge dash</code>	Dashboard	Links: https://anaconda.org/conda-forge/dash https://dash.plotly.com/layout
matplotlib	<code>conda install -c conda-forge matplotlib</code> Should already come preinstalled with Anaconda	Visualization	Links: https://matplotlib.org/contents.html https://anaconda.org/conda-forge/matplotlib
nltk	<code>conda install -c anaconda nltk</code> Should already come preinstalled with Anaconda	Machine Learning (NLP)	Links: http://www.nltk.org/ https://anaconda.org/anaconda/nltk
numpy	<code>conda install -c anaconda numpy</code> Should already come preinstalled with Anaconda	Data Manipulation	Links: https://numpy.org/doc/stable/ https://anaconda.org/anaconda/numpy
opencv	<code>conda install -c conda-forge opencv</code>	Machine Learning (OCR)	Links: https://anaconda.org/conda-forge/opencv
os	*part of the standard Python library	File Management	Link: https://docs.python.org/3/library/os.html
pandas	<code>conda install -c anaconda pandas</code> Should already come preinstalled with Anaconda	Data Manipulation	Links: https://pandas.pydata.org/docs/ https://anaconda.org/anaconda/pandas
pathlib	*part of the standard Python library	File Management	Link: https://pathlib.readthedocs.io/en/pep428/
pillow	<code>conda install -c conda-forge pillow</code> Should already come preinstalled with Anaconda	File Management (reading image files)	Links: https://pillow.readthedocs.io/en/stable/ https://anaconda.org/conda-forge/pillow
plotly	<code>conda install -c plotly plotly</code>	Visualization	Links: https://plotly.com/python/plotly-express/ https://anaconda.org/plotly/plotly
pytesseract	<code>conda install -c conda-forge pytesseract</code>	Machine Learning (OCR)	Links: https://github.com/madmaze/pytesseract https://anaconda.org/conda-forge/pytesseract

Python Packages Cheat Sheet

List of Popular Packages

Package Name	Conda Code to Install	Category	Additional Information
requests	<code>conda install -c anaconda requests</code> Should already come preinstalled with Anaconda	Web Scraping	Links: https://requests.readthedocs.io/en/master/ https://anaconda.org/anaconda/scipy
scikit-learn	<code>conda install -c anaconda scikit - learn</code> Should already come preinstalled with Anaconda	Statistical Analysis	Links: https://scikit-learn.org/ https://anaconda.org/anaconda/scikit-learn
scipy	<code>conda install -c anaconda scipy</code> Should already come preinstalled with Anaconda	Statistical Analysis	Links: https://www.scipy.org/ https://anaconda.org/anaconda/statsmodels
seaborn	<code>conda install -c anaconda seaborn</code> Should already come preinstalled with Anaconda	Visualization	Links: https://seaborn.pydata.org/ https://anaconda.org/anaconda/seaborn
selenium	<code>conda install -c conda - forge selenium</code>	Web Scraping	Links: https://selenium-python.readthedocs.io/installation.html https://anaconda.org/conda-forge/selenium Note: the corresponding Chrome driver should also be downloaded from here: https://sites.google.com/a/chromium.org/chromedriver/downloads
shutil	*part of the standard Python library	File Management	Link: https://docs.python.org/3/library/shutil.html
spacy	<code>conda install -c conda - forge spacy</code>	Machine Learning (NLP)	Links: https://spacy.io/ https://anaconda.org/conda-forge/spacy
spacy-model-en_core_web_sm	<code>conda install -c conda - forge spacy - model-en_core_web_sm</code>	Machine Learning (NLP)	Links: https://anaconda.org/conda-forge/spacy-model-en_core_web_sm
statsmodels	<code>conda install -c anaconda statsmodels</code> Should already come preinstalled with Anaconda	Statistical Analysis	Links: https://www.statsmodels.org/stable/index.html https://anaconda.org/anaconda/statsmodels
streamlit	<code>pip install streamlit</code>	Dashboard	Links: https://docs.streamlit.io/en/stable/ https://docs.streamlit.io/en/stable/troubleshooting/clean-install.html
tabula-py	<code>conda install -c conda - forge tabula - py</code>	File Manipulation (reading PDF files)	Links: https://tabula-py.readthedocs.io/en/latest/ https://anaconda.org/conda-forge/tabula-py
urllib3	<code>conda install -c anaconda urllib3</code> Should already come preinstalled with Anaconda	Web Scraping	Links: https://urllib3.readthedocs.io/en/latest/ https://anaconda.org/anaconda/urllib3