

1) Numpy

```
$ pip install numpy
```

2) Scipy

```
$ pip install scipy
```

3) Pandas

```
$ pip install pandas
```

4) Statsmodel

```
$ conda install -c conda-forge statsmodels
```

5) Matplotlib

```
$ sudo apt-get install python3-matplotlib
```

or

```
$ python -m pip install -U matplotlib
```

6) Seaborn

```
$ pip install seaborn
```

or

```
$conda install seaborn
```

or

```
$pip install git+https://github.com/mwaskom/seaborn.git
```

7) Plotly

```
$pip install plotly==4.1.0
```

or

```
$conda install -c plotly plotly=4.1.0
```

Jupyter Notebook Support

```
$pip install "notebook>=5.3" "ipywidgets>=7.2"
```

or

```
$conda install "notebook>=5.3" "ipywidgets>=7.2"
```

```
$conda install -c conda-forge jupyterlab
```

or

```
$pip install jupyterlab
```

8) Bokeh

```
$ conda install bokeh
```

In case you require additional dependencies

use pypi.org

```
Jinja2 >=2.7
```

```
numpy >=1.7.1
```

```
packaging >=16.8
```

```
pillow >=4.0
```

```
python-dateutil >=2.1
```

```
PyYAML >=3.10
```

```
six >=1.5.2
```

```
tornado >=4.3
```

9)pydot

```
$pip install pydot
```

Machine Learning

10) Scikit-learn

```
$pip install -U scikit-learn
```

or

```
$conda install scikit-learn
```

10) XGBoost / LightGBM

XGBoost

```
$sudo apt-get install python-setuptools
```

Open <https://pypi.org/>

```
$pip install xgboost
```

LightGBM

```
$ pip install lightgbm
```

11) CatBoost

```
$pip install catboost
```

12) Eli5

ELI5 works in Python 2.7 and Python 3.4+. Currently it requires scikit-learn 0.18+. You can install ELI5 using pip:

```
pip install eli5
```

Deep Learning

13) Tensor Flow

```
$pip install --upgrade pip
```

```
$pip install tensorflow==2.0.0-rc0
```

14) Pytorch

```
$conda install pytorch torchvision cpuonly -c pytorch
```

15) Keras

Install Keras from PyPI (recommended):

```
$sudo pip install keras
```

If you are using a virtualenv, you may want to avoid using sudo:

```
$pip install keras
```

Alternatively: install Keras from the GitHub source:

First, clone Keras using git:

```
$git clone https://github.com/keras-team/keras.git
```

Then, cd to the Keras folder and run the install command:

```
$cd keras
```

```
$sudo python setup.py install
```

Distributed Deep Learning

16) Dist-keras / elephas / spark-deep-learning

Dist-keras

When you only require the framework for development purposes, just use \$pip to install dist-keras.

```
$pip install --upgrade dist-keras
```

Or

```
$pip install --upgrade git+https://github.com/JoeriHermans/dist-keras.git
```

Elephas

\$pip install elephas
Pyspark
\$pip install pyspark

Natural Language Processing

17) Nltk
\$pip install nltk

18) Spacy
\$pip install spacy
\$python -m spacy download en_core_web_sm
\$python -m spacy download xx_ent_wiki_sm
import spacy
nlp = spacy.load("xx_ent_wiki_sm")

19) Gensim
\$pip install --upgrade gensim
or
\$conda install -c conda-forge gensim

Lastly
Data Scraping

20) Scrapy
\$pip install scrapy
or
\$conda install -c conda-forge scrapy

Bonus
Theano
\$pip install Theano

Additional Useful Data Science Links:

Now for deep knowledge I will leave some links

www.towardsdatascience.com
<https://github.com/dotnet/machinelearning>

Papers with code. Sorted by stars. Updated weekly.
<https://github.com/zziz/pwc>

FAIR's research platform for object detection research, implementing popular algorithms like Mask R-CNN and RetinaNet
<https://github.com/facebookresearch/Detectron>

Pytorch implementation of our method for high-resolution (e.g. 2048x1024) photorealistic video-to-video translation.
<https://github.com/NVIDIA/vid2vid>

Code to reproduce "imagenet in 18 minutes" DAWN-benchmark entry

https://github.com/cybertronai/imagenet18_old

A paper list of object detection using deep learning.

https://github.com/hoya012/deep_learning_object_detection

A real-time approach for mapping all human pixels of 2D RGB images to a 3D surface-based model of the body

<http://densepose.org>

<https://github.com/facebookresearch/DensePose>

Implementation of Everybody Dance Now by pytorch

<https://github.com/nyoki-mtl/pytorch-EverybodyDanceNow>

<https://www.analyticsvidhya.com/blog/2017/06/introductory-generative-adversarial-networks-gans/>

Code and data for paper "Deep Painterly Harmonization": <https://arxiv.org/abs/1804.03189>

<https://github.com/luanfujun/deep-painterly-harmonization>

beach_umbrella Keras Implementation of Painting outside the box

<https://github.com/bendangnuksung/Image-OutPainting>

Pytorch-based tools for visualizing and understanding the neurons of a GAN. <https://gandissect.csail.mit.edu/>

<https://github.com/CSAILVision/gandissect>

GANimation: Anatomically-aware Facial Animation from a Single Image (ECCV'18 Oral) [PyTorch]

<http://www.albertpumarola.com/>

<https://github.com/albertpumarola/GANimation>

Style transfer, deep learning, feature transform

<https://github.com/NVIDIA/FastPhotoStyle>

A Flow-based Generative Network for Speech Synthesis

<https://github.com/NVIDIA/waveglow>

<https://www.analyticsvidhya.com/blog/2017/08/audio-voice-processing-deep-learning/>

<https://www.analyticsvidhya.com/blog/2018/01/10-audio-processing-projects-applications/>

Machine learning models and utilities for exoplanet science.

<https://github.com/google-research/exoplanet-ml>

A platform to visualize the deep learning process and result. <http://visualdl.paddlepaddle.org>

<https://github.com/PaddlePaddle/VisualDL>

TensorFlow code and pre-trained models for BERT <https://arxiv.org/abs/1810.04805>

<https://github.com/google-research/bert>

MatchZoo

Facilitating the design, comparison and sharing of deep text matching models.

<https://github.com/NTMC-Community/MatchZoo>

Repository to track the progress in Natural Language Processing (NLP), including the datasets and the current state-of-the-art for the most common NLP tasks. <https://nlpprogress.com/>
<https://github.com/sebastianruder/NLP-progress>

Accessible AutoML for deep learning. <http://autokeras.com/>

<https://github.com/keras-team/autokeras>

Fast and flexible AutoML with learning guarantees. <https://adanet.readthedocs.io>
<https://github.com/tensorflow/adanet>

An educational resource to help anyone learn deep reinforcement learning. <https://spinningup.openai.com/>
<https://github.com/openai/spinningup>

Dopamine is a research framework for fast prototyping of reinforcement learning algorithms.
<https://github.com/google/dopamine>
<https://github.com/google/dopamine>

Motion imitation with deep reinforcement learning.
<https://github.com/xbpeng/DeepMimic>

A collection of Reinforcement Learning algorithms from Sutton and Barto's book and other research papers implemented in Python.
<https://github.com/Pulkit-Khandelwal/Reinforcement-Learning-Notebooks>