



PYTHON DATA SCIENCE ECOSYSTEM

Here are some great resources to learn the basics of Python Data Science Ecosystem (for Data interpretation, wrangling and visualizations) – Pandas, Numpy & Matplotlib/Seaborn.

These are the prerequisites and will serve as a foundation with your Data Cleaning, Munging and Visualizations before you dive into the world of Machine Learning Model building.

Please remember they are just tools to solve your problem. Change is the only constant. So, focus on; Learn, unlearn and relearn! Be adaptable and flexible.

Once you have the foundations on these it is very easy to grasp other complementary stuff like Dask, Apache Spark dataframes or advanced visualization using some other libraries. Also, be it numeric data, text, images or videos you would be using these or similar set of tools everywhere.

Practice makes perfect. It's all about writing great code! Let's get started...

Step 1: Install Anaconda - <https://docs.anaconda.com/anaconda/install/>

Anaconda is a free and open-source distribution of the Python programming language for scientific computing, that aims to simplify package management and deployment. The distribution includes data-science packages suitable for Windows, Linux, and macOS. Pandas, matplotlib, NumPy, sklearn etc. all comes bundled with Anaconda distribution.

PANDAS

A Gentle Visual Intro to Data Analysis in Python Using Pandas

<http://jalammar.github.io/gentle-visual-intro-to-data-analysis-python-pandas/>

Visualizing Pandas' Pivoting and Reshaping Functions

<http://jalammar.github.io/visualizing-pandas-pivoting-and-reshaping/>

Practice Pandas - Solve Pandas exercise here:

<https://pynative.com/python-pandas-exercise/>

MATPLOTLIB

Python Matplotlib Exercise

<https://pynative.com/python-matplotlib-exercise/>

Seaborn

<https://wellsr.com/python/seaborn-plots-for-python-data-visualization/>

NUMPY

A Visual Intro to NumPy and Data Representation

<http://jalammar.github.io/visual-numpy/>

Practice Numpy - Solve Numpy problems:

<https://pynative.com/python-numpy-exercise/>

A few other great resources to get your hands dirty:

100 Pandas Puzzles:

<https://github.com/ajcr/100-pandas-puzzles/blob/master/100-pandas-puzzles.ipynb>

100 Numpy Puzzles:

<https://github.com/rougier/numpy-100>