

Introduction to Python

SIT training program





What is Python?

- Open source software
 - Open Source Initiative (OSI) organisation
- Interpreted language, not compiled
- High level language
- Clean syntax
- Object Oriented Programming language (OOP)
- Differences with other PLs: R
 - Syntax, speed
- Programming environments
 - Visual Studio Code
- **Anaconda (Python 3.7)**
 - **Jupyter Notebook**

Anaconda Distribution

The World's Most Popular Python/R Data Science Platform

[Download](#)

The open-source [Anaconda Distribution](#) is the easiest way to perform Python/R data science and machine learning on Linux, Windows, and Mac OS X. With over 15 million users worldwide, it is the industry standard for developing, testing, and training on a single machine, enabling *individual data scientists* to:

- Quickly download 1,500+ Python/R data science packages
- Manage libraries, dependencies, and environments with [Conda](#)
- Develop and train machine learning and deep learning models with [scikit-learn](#), [TensorFlow](#), and [Theano](#)
- Analyze data with scalability and performance with [Dask](#), [NumPy](#), [pandas](#), and [Numba](#)
- Visualize results with [Matplotlib](#), [Bokeh](#), [Datashader](#), and [HoloViews](#)

