

# Python Programming

# What is Python

- Python is
  - a powerful high level programming language
  - object-oriented: encapsulate code in object
  - a suitable language for beginners
    - few keywords, simple structure, clear syntax
  - interpreted: processed at run-time
  - interactive: use Python prompt

# Installation

- Anaconda distribution
  - Easiest way to perform Python/R data science and machine learning on Linux, Windows, and Mac OS X
  - Access to Python/R data science packages (numpy)
  - Manage libraries, dependencies, and environments with Conda
  - Develop machine learning and deep learning models (scikit-learn, Tensorflow)
  - Download Python 3.7 version (<https://www.anaconda.com/distribution>)

# Resources

- Jupyter notebook
  - <https://www.dataquest.io/blog/jupyter-notebook-tutorial/>
- Python
  - <http://cs231n.github.io/python-numpy-tutorial/>
  - <https://www.guru99.com/python-tutorials.html> (Python basics, data structure, fundamentals)
  - <https://www.w3schools.com/python/>

**See you at the workshop**