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)
  - Dowload Python 3.7 version (https://www.anaconda.com/distribution)

Installation

- Deep learning packages
  - Follow the link (https://medium.com/@margaretmz/anaconda-jupyter-notebook-tensorflow-and-keras-b91f381405f8)
    - Install TensorFlow (including Keras)
    - Launch Jupyter Notebook (with cpu)

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