DAVPython

Data Analysis and Visualization with Python

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DAVPython - Version: 1

🕐 1 days Course

Description:

Python is the most popular language used by data scientists because it is very intuitive, easy to understand, has a lot of modules and framework and has relatively short development time.

In this one day course/workshop we will start by introducing the Anaconda and jupyter notebook, continue with numpy arrays creation, access and manipulation, while emphasizing performance efficiency and memory management.

We will continue with Pandas and its unique table-oriented data structures, their Index preserving operations, broadcasting, combining datasets and aggregations. We will use the Matplotlib for data visualizations.

Numpy:

Numpy is one of the basic python frameworks for data science. Almost all the power of?Python's?data science modules is built on top of it.

Numpy is array oriented module, designed for scientific computing with?high-performance and very efficient calculations.

Numpy used for scan and operate?data sets, for data aggregations and advanced statistics.

Pandas:

Pandas is a fast, powerful, flexible and easy to?use package for data analysis.

Pandas is built on top of Numpy and it works with table data structures that comes from various of sources, such as data-bases, csv and json files and etc.

Pandas is used for advanced data analysis, filtering, aggregations, grouping and merging data-

sets.
Numplotlib
Python use the Matplotlib package for visualization that supports a lot of different types of plots.

Intended audience:

Developers,? data-analysts

Prerequisites:

Basic knowledge in Python, Basic knowledge? in Data Science

Objectives:

get familiar with the most common modules for data analysis
Learn how to use Pandas's and Numpy's build-in data structures
working with named tables and series for access, filter, manipulations, combinations and aggregations
Learn how to show data in simple visual way using plots

Topics:

º Jupyter notebook

º Numpy arrays manipulations

º Working with datasets in Pandas

º Brief Intro to Numplotlib