Formation Python - Data Science in Geneva, Zurich, Huston, San-Antonio, Dallas, Los Angeles, San Diego, New York, Washington, Chicago, San Francisco and anywhere in Switzerland, USA, Great Britain and Germany.

ID : 1115

Goal : In this training you will learn how to put into practice with Python the tools of data processing and manipulation, graphic visualizations, statistical inferences, machine learning, data mining, text mining and artificial intelligence by avoiding as most of possible to rewrite codes from scratch.

Audience : This training is mainly intended for engineers, mathematicians, physicists, chemists, biologists, financiers, logisticians, managers, statisticians or any other profile having to deal with

statistical analysis as part of their work and wishing to avoid creating formulas or macros with a spreadsheet software.

Prerequisites : Have very strong theoretical knowledge in advanced calculus and statistics and have mastered the fundamentals of Python programming. This training also requires the ability to mentally represent simple and complex mechanisms and processes (the underlying mathematical models are neither demonstrated nor explained because of a lack of time excepted on special request).

Goals :

- Introduction
- Numerical analysis with Numpy
- Creation of numberical objects with Ndarray
- Tools of numerical analysis
- Data structures with Pandas (DataFram, Series ...)
- Import and export data with Pandas
- Data handling, transformation and cleaning
- Creating DataFrame and Series objects
- Missing data processing
- Data wrangling
- Graphical visualization of data with Matplotlib and Seaborn
- Time Series processing
- Introduction to Scipy and Statsmodels
- Probability functions
- Hypothesis tests (statistical inference tools)
- NHST for means
- NHST for Categorical data
- Introduction to scikit-learn
- Linear or regularized regression models
- The different logistic regressions
- ...

Pedagogical method : This training is based on exercises mainly imposed by the trainer and taken from the books that serves as a support for the training. The trainer can, if he wishes, but without obligation, work on the data of the learners. The training is without mathematical proofs and explanations of test output results and the statistical concepts are assumed to be known. Do not hesitate to contact us to adapt the program to your technical needs and understanding.

Suggested duration for presentiel training (days) : 5
Suggested duration for on-line training (days) : 6

Daily price in face-to-face : 1000 CHF
Daily price in remote : 480 CHF
Daily price in remote for students : contact us (only if student card!)
Daily price in remote (with recording) : 5000 CHF
Prices are per day per trainee without course material, without certificate, without evaluation, without exam, without training room or computer (these are each optional and must be requested in addition in the contact form for the establishment of the quote).

Book

- **Title :** *Learning Python: Powerful Object-Oriented Programming*
- **Author(s) :** *Mark Lutz*
- **Pages :** *1645*
- **ISBN :** *9781449355739*

Tags : python training, python language, python programming, python course, python data science, python for data scientists, python machine learning training, python artificial intelligence.