Python for Data Science (Hamburg)

Duration: 24 hours (3 days)

Preconditions

To be successful in this course, learners should have the following:

- Foundational Python skills and knowledge
- Level of knowledge and experience gained from Introduction to Python

Target group

- Intermediate Python developers looking to use Python to explore and visualize large or complex data sets.

Objectives

- Learn how to use data science with Python.
- Create data pipeline workflows to analyze, visualize, and gain insights from data.
- Build a portfolio of data science projects with real world data.
- Analyze your own data sets and gain insights through data science.
- Master critical data science skills.
- Replicate real-world situations and data reports.
- Learn NumPy for numerical processing with Python.
- Conduct feature engineering on real world case studies.
- Learn Pandas for data manipulation with Python.
- Learn Matplotlib to create fully customized data visualizations with Python.
- Learn Seaborn to create beautiful statistical plots with Python.
- Construct a modern portfolio of data science resume projects.
- Get set-up quickly with the Anaconda data science stack environment.

Table of Content

- Python Basics
- Jupyter Notebooks
- NumPy
- Pandas
- Data: Excel
- CSV
- SQL
- Convert datasets to dataframes
- Alter specific data using custom functions
- Handle missing data

- Aggregate data
- Matplotlib for fully customizable plots
- Implement custom figures and axis
- Seaborn for statistical plots
- Scatter Plots
- Distribution Plots
- Box Plots