Our **trainings** introduce the foundations of data analysis and relevant tools for data scientists. During our sessions, we always keep data-driven use cases in sight. Our modular training concept consists of skill building blocks from introductory to expert level. We emphasize applications and a hands-on approach. All trainings take place in a virtual environment or on-site. Our trainers are senior data scientists with extensive experience in research and industry.

Our **TechTrainings** are geared towards technical users - data scientists, analysts, engineers - building data-driven innovation hands-on.

Our **BusinessTrainings** provide insights for decision makers - shedding light on how to put data science and artificial intelligence to work in the enterprise.

We use our **digital laboratory in the cloud**, thus each participant can work at his workspace independently while the trainer is presenting. We focus on interactivity, hands-on and individual support. This is what we aim with our developed and well tested trainings material in Jupyter Notebooks, small group sizes and enough time for practice.
Intensive hands-on introduction to powerful Python analytics tools. Besides a basic overview on Python, we focus on relevant libraries and methods for data handling, visualization and analytics within the PyData stack.

Level: 🟢 (Beginner)
Duration: 2 days
Prerequisites: basic programming skills
Language: english, german; materials are in english

1. **Python Basics**
   Learn the basics of the Python programming language.

2. **Efficient Computing with **`numpy`**
   Apply the `numpy` library to process efficiently large amounts of data.

3. **Basic data Handling with **`pandas`
   Learn to import and work with tabular data, supported by the `pandas` library.

4. **Plotting and Data Visualization**
   Visualize and interpret data with plots and charts.

5. **Introduction to Statistics**
   First steps with statistics concepts needed for data analysis.

6. **Exercises**
   A. **Museums of France:**
      An exercise with a clear task, requiring you to apply the learnings from the course.
   B. **Titanic:**
      An open-ended exercise to practice answering questions with data.

7. **Outlook: Handling Time Series with **`pandas`
   Learn to work with time series data.

8. **Outlook: Machine Learning**
   A preview on machine learning applications.