

Interactive Data Analysis with Pandas Descriptive Information

Prerequisites/Assumptions: The material in this lecture assumes basic knowledge of Python, Series and DataFrames.

Duration: This module is designed to be covered in two lectures and is complemented by Lab assignment aimed at reinforcing students' knowledge on Pandas data structures and its use for data exploration.

Tips for teaching: The materials are intended to be presented in a mixed format of introducing the corresponding concepts by the instructor along with dynamically demonstrating example codes using Jupyter notebook followed by hands-on work where students perform the illustrated data visualization methods by themselves. The lecture material and exercises are accompanied by notebooks as html files capturing all dynamically demonstrated examples.

Additional Reading:

1. Rossant C. Learning IPython for Interactive Computing and Data Visualization. Packt Publishing, 2015.
2. Rossant C. IPython Interactive Computing and Visualization Cookbook. Packt Publishing, 2014.
3. Modern Pandas (Part 1): Prior Arts <http://tomaugspurger.github.io/modern-1.html>
4. Modern Pandas (Part 2): Method Chaining <http://tomaugspurger.github.io/modern-2.html>
5. Modern Pandas (Part 2): Method Chaining <http://tomaugspurger.github.io/modern-2.html>
6. 9 popular ways to perform Data Visualization in Python:
<https://www.analyticsvidhya.com/blog/2015/05/data-visualization-python/>