

Course Description

Pandas DataFrames are the most widely used in-memory representation of complex data collections within Python. Whether in finance, scientific fields, or data science, a familiarity with Pandas is essential. This course teaches you to work with real-world data sets containing both string and numeric data, often structured around time series. You will learn powerful analysis, selection, and visualization techniques in this course.

1 Data ingestion & inspection **FREE**

100%

In this chapter, you will be introduced to Panda's DataFrames. You will use Pandas to import and inspect a variety of datasets, ranging from population data obtained from The World Bank to monthly stock data obtained via Yahoo! Finance. You will also practice building DataFrames from scratch, and become familiar with Pandas' intrinsic data visualization capabilities.

VIEW CHAPTER DETAILS

Completed

2 Exploratory data analysis

100%

Having learned how to ingest and inspect your data, you will next explore it visually as well as quantitatively. This process, known as exploratory data analysis (EDA), is a crucial component of any data science project. Pandas has powerful methods that help with statistical and visual EDA. In this chapter, you will learn how and when to apply these techniques.

VIEW CHAPTER DETAILS

Completed

3 Time series in pandas

100%

In this chapter, you will learn how to manipulate and visualize time series data using Pandas. You will become familiar with concepts such as upsampling, downsampling, and

interpolation. You will practice using Pandas' method chaining to efficiently filter your data and perform time series analyses. From stock prices to flight timings, time series data are found in a wide variety of domains and being able to effectively work with such data can be an invaluable skill.

VIEW CHAPTER DETAILS

Completed

4 Case Study - Sunlight in Austin

100%

Working with real-world weather and climate data, in this chapter you will bring together and apply all of the skills you have acquired in this course. You will use Pandas to manipulate the data into a form usable for analysis, and then systematically explore it using the techniques you learned in the prior chapters. Enjoy!

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