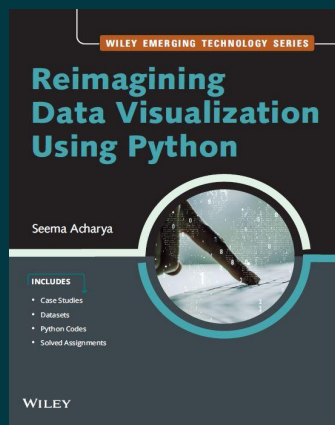




Reimagining Data Visualization Using Python

By Seema Acharya

Paperback

9789354641336

₹1,099.00

Description

Reimagining Data Visualization Using Python is an extensive discourse on data visualization. It details how to perform data visualization on a variety of datasets using various data visualization libraries written in Python programming language. Understanding, visualizing, and presenting data is slowly and gradually becoming a must have skills for professionals in all disciplines. This book is designed for learners who are beginners in visualization using python. It is a guide with detailed out steps to write and execute command/code.

About the Author

Seema Acharya

Seema Acharya is an Associate Vice President and Senior Lead Principal with the Education, Training and Assessment department of Infosys Limited. She is a technology evangelist, a learning strategist

Table of Contents

Preface

Acknowledgments

About the Authors

Chapter 1 Introduction to Data Visualization

1.1 What is Data Visualization?

1.2 Evolution of Data Visualization

1.3 Why do We Need Data Visualization?

1.4 Difference between Data Visualization and Infographics

1.5 Principles of Gestalt's Theory of Visual Perception

1.6 Advantages of Data Visualization

1.7 Benefits of Data Visualization

Chapter 2 Types of Digital Data

2.1 What is in Store?

2.2 Classification of Digital Data

2.3 Structured versus Unstructured Data

Chapter 3 Reading Data from Varied Data Sources into Python DataFrame

3.1 Read from Excel Data Source

3.2 Read Data from .csv

3.3 Load a Python Dictionary into a DataFrame

3.4 Reading JSON data into a Pandas DataFrame

3.5 Reading Data from Microsoft Access Database

3.6 Reading Data from .txt File

3.7 Reading Data from XML File

Chapter 4 Pros and Cons of Charts

4.1 Pie Chart

4.2 Tree Map

4.3 Heat Map

4.4 Scatter Plot

4.5 Histogram

4.6 Word Cloud

4.7 Box Plot

Chapter 5 Good Chart Designs

5.1 Mistakes That Can Be Avoided

5.2 Less Is More

5.3 Tables versus Charts

Chapter 6 Data Wrangling in Python

6.1 Pandas Data Manipulation

6.2 Dealing with Missing Values

6.3 Date Reshaping

6.4 Filtering Data

6.5 Merging Data

6.6 Subsetting DataFrames in Pandas

6.7 Reshaping the Data and Pivot Tables

6.8 Backfill

6.9 Forward Fill

Chapter 7 Functions in Python Pandas

7.1 Pandas DataFrame Functions

Chapter 8 Matplotlib for Data Visualization

8.1 Exploratory Data Analysis using Python

8.2 Matplotlib

Chapter 9 Plotly for Data Visualization

9.1 Plotly Python Package

Chapter 10 Seaborn for Data Visualization

10.1 Seaborn Plots Using “iris” Dataset

10.2 Seaborn Plots Using “Superstore” Dataset

10.3 Seaborn Plots Using “OLYMPIC” Dataset

10.4 Seaborn Plots Using “Passengers Flights” Dataset

Chapter 11 Cases

11.1 Case Study 1

11.2 Case Study 2

Appendix Python Assignments

To purchase this product, please visit:

<https://www.wileyindia.com/reimagining-data-visualization-using-python.html>



Scan to buy