

DATA VISUALIZATION

ADVANCED

4 DAYS

Data Visualization and Analysis with Python

Build a strong foundation in data analysis and visualization using Python by mastering key libraries for data processing and exploration. Learn how to perform exploratory analysis, create interactive dashboards, and present data driven insights through effective visual storytelling to support informed business decisions.

Why Python Visualization?

Actionable Insights from Data

Python's data visualization and analysis capabilities allow your team to uncover patterns, trends, and correlations in your data, helping you make informed decisions and identify new opportunities.

Cost-Effectiveness

Python is an open-source programming language, and many of its data analysis and visualization libraries are also open-source. This makes it a cost-effective solution.

Data-Driven Decision Making

Python's data analysis capabilities empower your team to base their decisions on concrete evidence and data, reducing guesswork and minimizing risks.

What you'll be able to do

- ✓ Develop a strong command over essential Python libraries for data manipulation and analysis.
- ✓ Learn how to handle and preprocess data effectively.
- ✓ Acquire the skills to create a variety of static and interactive visualizations.
- ✓ Perform thorough exploratory data analysis to uncover hidden patterns, trends, and relationships within the data and gain valuable insights.
- ✓ Utilize Pandas and NumPy for data aggregation, filtering, and advanced analysis.
- ✓ Understand the importance of data-driven decision-making and how Python's visualization and analysis tools can support your team in making informed choices for your business.
- ✓ Learn the art of visual storytelling and how to present complex data insights in a compelling narrative.
- ✓ Develop interactive dashboards using Python libraries.
- ✓ Familiarize yourself with best practices in data visualisation.

Who this is for

- Data Analysts
- Data Scientists
- Product Managers
- IT Professionals
- Any Professional Dealing with Data

Curriculum

01 Python for Analysis

- Apply python for analysis in practical visualization workflows
- Build and refine examples using realistic datasets
- Check clarity, accuracy, and stakeholder readability
- Document choices and iterate based on feedback

02 Pandas and NumPy

- Apply pandas and numpy in practical visualization workflows
- Build and refine examples using realistic datasets
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03 Matplotlib and Seaborn

- Apply matplotlib and seaborn in practical visualization workflows
- Build and refine examples using realistic datasets
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04 Plotly and Bokeh

- Apply plotly and bokeh in practical visualization workflows
- Build and refine examples using realistic datasets
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05 EDA and Aggregation

- Apply eda and aggregation in practical visualization workflows
- Build and refine examples using realistic datasets
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06 Cleaning and Time Series

- Apply cleaning and time series in practical visualization workflows
- Build and refine examples using realistic datasets
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07 Geospatial and Customization

- Apply geospatial and customization in practical visualization workflows
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08 ML Visuals

- Apply ml visuals in practical visualization workflows
- Build and refine examples using realistic datasets
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09 Storytelling

- Apply storytelling in practical visualization workflows
- Build and refine examples using realistic datasets
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10 Panel Dashboards

- Apply panel dashboards in practical visualization workflows
- Build and refine examples using realistic datasets
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11 Ethics and Case Studies

- Apply ethics and case studies in practical visualization workflows
- Build and refine examples using realistic datasets
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