

DATA VISUALIZATION

ADVANCED

5 DAYS

Data Visualization and Analysis with R

Build a strong foundation in data analysis and visualization using R by mastering data preparation, exploration, and statistical techniques. Learn how to create advanced, interactive, and real time visualizations that uncover insights and support timely, data driven business decisions.

Why R Visualization?

Comprehensive Data Understanding

R's data visualization and analysis capabilities enable businesses to understand their data better.

Data-Driven Decision Making

By harnessing R's analytical tools and visualizations, businesses can make well-informed decisions based on data rather than intuition.

Improved Business Performance

Armed with data analysis and visualizations from R, businesses can identify growth opportunities, optimize processes, and enhance customer experiences.

What you'll be able to do

- ✓ Gain a solid foundation in the R programming language.
- ✓ Learn techniques to import data from various sources into R and effectively manipulate and clean datasets for analysis.
- ✓ Understand the principles of exploratory data analysis and use R's visualization tools to uncover patterns, relationships, and anomalies in the data.
- ✓ Acquire expertise in creating a wide range of static and interactive data visualizations using R.
- ✓ Explore advanced visualization techniques in R, such as geospatial visualizations, time series plotting, and interactive dashboards.
- ✓ Integrate statistical analysis into data exploration using R's statistical packages.
- ✓ Learn how to process and visualize real-time data streams in R, enabling businesses to respond promptly to changing conditions.

Who this is for

- Data Analysts and Data Scientists
- Business Analysts and Managers
- IT Professionals:
- Financial Analysts and Economists
- Anyone Interested in Data Analysis and Visualization

Curriculum

01 R Foundations for Visualization

- Apply r foundations for visualization 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 Data Import and Wrangling

- Apply data import and wrangling in practical visualization workflows
- Build and refine examples using realistic datasets
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03 Base Graphics and ggplot2

- Apply base graphics and ggplot2 in practical visualization workflows
- Build and refine examples using realistic datasets
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04 Interactive and Geospatial Viz

- Apply interactive and geospatial viz in practical visualization workflows
- Build and refine examples using realistic datasets
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05 Time Series Viz and Forecasting

- Apply time series viz and forecasting in practical visualization workflows
- Build and refine examples using realistic datasets
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06 Statistical and ML Visuals

- Apply statistical and ml visuals in practical visualization workflows
- Build and refine examples using realistic datasets
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07 Shiny Dashboards

- Apply shiny dashboards in practical visualization workflows
- Build and refine examples using realistic datasets
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08 R Markdown Reporting

- Apply r markdown reporting in practical visualization workflows
- Build and refine examples using realistic datasets
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09 Domain Visualizations

- Apply domain visualizations in practical visualization workflows
- Build and refine examples using realistic datasets
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10 Ethics and Best Practices

- Apply ethics and best practices in practical visualization workflows
- Build and refine examples using realistic datasets
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11 Projects and Case Studies

- Apply projects and case studies in practical visualization workflows
- Build and refine examples using realistic datasets
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- Document choices and iterate based on feedback