

DATA VISUALIZATION

ADVANCED

5 DAYS

Data Visualization with Plotly & Dash

Build a strong foundation in interactive data visualization and dashboard development using Plotly and Dash. Learn how to preprocess data, design advanced visualizations, build real time interactive dashboards, and deploy data driven applications for scalable business analytics.

Why Plotly and Dash?

Interactive and Engaging Visualizations

Plotly and Dash enable the creation of interactive and engaging visualizations. Interactive visualizations captivate stakeholders, encouraging them to explore and interact with the data, leading to a deeper understanding of insights.

Data-Driven Decision Making

The combination of Plotly and Dash empowers your team to present data insights visually compellingly, enabling data-driven decision-making across the organization.

Real-Time Data Insights

Dash's capability to handle live data and dynamic updates empowers your team to visualize real-time data and swiftly respond to changing trends and patterns.

What you'll be able to do

- ✓ Gain proficiency in creating a wide range of interactive and static visualizations using Plotly.
- ✓ Learn how to use Dash to construct dynamic and interactive data-driven dashboards.
- ✓ Understand how to utilize Dash to visualize real-time or streaming data.
- ✓ Develop skills to customize the appearance and layout of visualizations and dashboards.
- ✓ Learn essential data preprocessing techniques using Pandas to prepare data for effective visualization and analysis with Plotly and Dash.
- ✓ Explore advanced Plotly functionalities, including subplots, annotations, and geospatial visualizations.
- ✓ Master Dash callbacks to establish interactivity and dynamic updating between UI components and data.
- ✓ Understand different deployment methods to host Dash apps on servers or cloud platforms.

Who this is for

- Data Analysts
- Data Scientists
- Business Analysts
- Data Engineers
- IT Professionals
- Any Professional Dealing with Data

Curriculum

01 Python/Pandas/NumPy Prep

- Apply python/pandas/numpy prep 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 Plotly Basics and Advanced Charts

- Apply plotly basics and advanced charts in practical visualization workflows
- Build and refine examples using realistic datasets
- Check clarity, accuracy, and stakeholder readability
- Document choices and iterate based on feedback

03 Dash Foundations

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

04 Callbacks and Interactivity

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

05 Real-Time and Live Data

- Apply real-time and live data in practical visualization workflows
- Build and refine examples using realistic datasets
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06 CSS Customization

- Apply css customization in practical visualization workflows
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07 Geospatial Viz

- Apply geospatial viz in practical visualization workflows
- Build and refine examples using realistic datasets
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08 Deployment

- Apply deployment in practical visualization workflows
- Build and refine examples using realistic datasets
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09 Widgets

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

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

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