Data Visualization Including Machine Learning Concepts using Tableau

Course description

BISP is now offering an in-depth understanding of Data Visualization Including Machine Learning concepts using Tableau for Tableau developers and complete Tableau Server training for Tableau administrators. Training includes 30 hours of hands-on exposure to ensure that you are left will a feeling of being an expert at the Tableau tool usage. We have considered the industry requirement & devised the course to ensure that you have the practical exposure required to swim through the interviews with ease. The case studies explained towards the end will only reinforce the practice learning to make you complete to face the real world projects & problems which are solved using Tableau. The datasets chosen ensures that you learn every option completely. With a lot of industry connects you get to know the job opportunities which none would otherwise. This course will help you unlock new career opportunities and gain an edge over other analysts. Our course will help you understand architecture

Data Visualization Including Machine Learning Concepts using Tableau online training curriculum

Introduction to Data Visualization with Tableau
- What is Data Visualization?
- Identify the prerequisites, goal, objectives, methodology, and Goal

Architecture of Tableau
- What is Tableau?
- Features of Tableau
- Installation of Tableau Desktop
- The interface of Tableau (Layout/Toolbars/Data Pane/Analytics Pane etc)

Managing Data Sources
- Connection to various data sources
- MySql Database connectivity and tables
- ODBC and other sources connectivity

Introduction to Visual Analytics with Tableau
- Introduction to various charts
- Bar Charts, Line Graphs, Pie Charts
- Maps, Scatter Plots, Gantt Charts, Bubble Charts
- Tree-maps and Box-and-Whisker Plots

Deep dive into Visualization
- Highlighting Tables, Heat Maps
- Circle Plots
- Side by Sidebar charts, Dual Axis Charts, Area Charts.
- Waterfall Charts, Bump Chart, Word Cloud Chart, Pareto Charts.
- Multiple fields: continuous and discrete visualization

Data Organization and Scripting
- Calculated Metrics, Apply Sorting on Dimension and Measures
- Calculating Total and Subtotals
- Various Aggregated measures, Percentages
- Data Spotlighting, Summary Card, Date and Time Functions
- Logical Functions
- Hierarchies, Groups, and Bins
- Prediction with extrapolation

Working with Time Dimension
- Quick Table Calculations
- Custom Table Calculations
- YTD, Parallel Period, Moving Averages
- Running totals, Window Averages
- Trend Lines and Predictive Models

Data Incremental Loading and Data Blending
- Data blending from multiple source systems Creating Incremental Loads
- Creating File Extractions, Parameters
- Python: Environment Setup and Essentials

Python Environment Installation and Configuration
- Jupyter Notebook Installation
- Jupyter Notebook Introduction
- Variable Assignment
- Basic Data Types: Integer, Float, String, None, and Boolean; Typecasting
- Creating, accessing, and slicing tuples
- Creating, accessing, and slicing lists
- Creating, viewing, accessing, and modifying dicts
- Creating and using operations on sets
- Basic Operators: 'in', '+', '*'
- Functions
- Control Flow

Data Manipulation with Python (Pandas)
- Introduction to Pandas
- Data Structures
- Series
- Data Frame
- Missing Values
- Data Operations

Data Manipulation with Python (Pandas) continues...
- Data Standardization
- Pandas File Read and Write Support
- SQL Operation

Machine Learning with Python (Scikit-learn)
- Introduction to Machine Learning
- Machine Learning Approach
- How Supervised and Unsupervised Learning Models Work
- Scikit-Learn
- Supervised Learning Models - Linear Regression
- K Nearest Neighbours (K-NN) Model
- Unsupervised Learning Models: Clustering
- Unsupervised Learning Models: Dimensionality Reduction
- Model Persistence

Apply Machine learning concepts in Tableau
- Linear Regression
- Clustering (K -Means)
- Data Forecasting
- Pearson correlation coefficient
- Integrate Tableau with Python using Tabby server

Tableau Server Comprehensive
- Single Installer
- Worker Installer
- Authentication
- Processes
- Data Server
- Create the First Admin User
- Create Projects and Groups
- Assign Permissions to Projects
- Data Connections
- Metadata management
- Connecting to data with Data Server
- Updating data sources