



DATA ANALYSIS AND VISUALIZATION

Joint Cetification Interactive Online Workshop

DURATION 16 HOURS





2. Getting to know your Data

- · Importing and Exporting your data
- Cleaning Data
- · Reading in Data
- Importing image data
- · Learning how to ask the right questions to ensure project success





3. Data Manipulation

- · Introduction to Pandas
- · Grouping and Pivoting with Pandas

1. Introduction to Data Visualization Introduction to Data Visualization Tools

and Setting Up Your Environment Introduction to Matplotlib, Seaborn,

Bokeh, Altair, Plotly, ggplot

· Basic to Advanced Manipulation with Pandas

4. Basic Customization of Plots

- · Defining axis and limit lengths
- · Defining plot line styles, properties, and formats
- Setting ticks, labels, and grids
- Adding a legend and annotations



6. More Advanced Plotting Techniques

- Creating word clouds, Network Diagrams, Matrices, 3D bars and 3D histograms
- · Animating in matplotlib
- Making a box and whisker plot
- Making geospatial plots, Gantt charts and error bars
- Creating Colormaps and logarithmic plots



5. Creating your First Plots

Introduction

Exploring the different plot types Plotting Scatter plots, Line Charts, Pie Charts, Histograms, Bar Charts, Box plots, Heatmaps, Pairplots and Facetings Plotting Sine and Cosine Plots



7. More Advanced Customizations

- Introduction
- Setting the transparency and size of axis labels
- · Adding a shadow to the chart line
- · Adding a data table
- Using subplots
- Customizing grids
- Creating contour grids · Filling an underplot area
- · Making use of text and font properties



Who Should Join

Faculties, Students, and Industry Professionals

Course Fee for Student: 990/-Course Fee for Professional: 1950/-

