

## Seminar & Workshop: Interactive Data Visualisation

### Summary

- ✓ Course dates: March 25 – 27, 2024
- ✓ Course duration: 3 days
- ✓ Language: English
- ✓ Location: Berlin
- ✓ Certificate: Certificate of Participation
- ✓ Format: On-site
- ✓ Lecturer: Dr. Dina Deifallah
- ✓ Price: 1400 €

### Course overview

Data Visualisation plays a crucial role in transforming complex datasets into easily understandable and insightful representations. It allows individuals, businesses and researchers to uncover patterns, trends, and relationships within their data. Proficiency in Data Visualisation not only improves one's analytical capabilities but also increases their capacity to convey insights in a visually compelling manner, ultimately contributing to more informed decision-making and successful outcomes in various professional contexts.

### Course content

#### Interactive Data Visualisation with Plotly

- ✓ Plotly Installation
- ✓ Basic Structure of Plotly Figures
- ✓ Plotly Express versus Figure Objects
- ✓ Bar and Pie Charts
- ✓ Histograms
- ✓ Boxplots
- ✓ Line, Scatter, Bubble and Multi-faceted Plots
- ✓ Heatmaps
- ✓ Choropleths

#### Customising Visualisations

- ✓ Customising Traces, Axes, Legends, Tooltip, Colour
- ✓ Colour Palette Generation Tools
- ✓ Adding Annotations

### Creating Dashboards with Dash and Plotly

- ✓ Install Dash and Jupyter-Dash
- ✓ Structure and creation of a Dash Application
- ✓ Dash HTML Layouts
- ✓ Adding Plotly Visualisations
- ✓ Adding Interactivity with Dropdowns, Checklists and Sliders
- ✓ Adding Interactivity with DatePickerSingle and DatePickerRange
- ✓ Dash Callback Functions
- ✓ Styling HTML Components

Throughout the course participants will use several public datasets and class exercises.

### Dates

March 25 – 27, 2024 from 10:00 - 18:00 (CET) on-site in Berlin.

### Booking and contact

Register here: <https://www.academy-tu.berlin/en/courses/short-courses>

Should you have any questions, please contact the TU Berlin Academy Team at: +49 30 4472 0232 or via email: [info@academy-tu.berlin](mailto:info@academy-tu.berlin). We hope to see you in Berlin - or online - very soon!