

Data Visualization and Storytelling

Course Description

This 12-hour workshop teaches participants the fundamentals of data visualization, which they can use to support data-driven decision-making and a data-driven culture. By the end of this course, they will be able to recognize misleading or inaccurate charts and graphs, understand the design principles involved in creating effective and accurate visualizations, and create a narrative that accurately supports the data, provides context, and reveals actionable insights.

Objectives

1. Create a narrative that accurately supports the data, provides context, and reveals actionable insights
2. Understand the design principles involved in creating effective and accurate visualizations
3. Recognize misleading or inaccurate charts and graphs provided by others

No background in math or data analysis is required.

Topics covered

Day One

- The basics of data visualization
- Getting started with data visualization
- The anatomy of a chart
- Q&A

Day Two

- Common charts & graphs
- Choosing a visual
- Reducing chart clutter
- Q&A

Day Three

- Visual design theory
- Common mistakes

- Misleading statistics & visual distortions
- Q&A

Day Four

- Data storytelling
- Q&A

Instructor Bio

Dr. Christian Wernz is currently an instructor at the DataSociety and a Senior Data Scientist at UVA Health. Prior, he worked as an Associate Professor in the Department of Health Administration at the Virginia Commonwealth University (VCU), and before that, as an Assistant Professor in the Department of Industrial and Systems Engineering at Virginia Tech. Dr. Wernz received his doctorate in Industrial Engineering and Operations Research from the University of Massachusetts Amherst. He obtained his bachelor's and master's degrees in Business Engineering from the Karlsruhe Institute of Technology (KIT), Germany. He also had project and employment stints at McKinsey & Co., Dell, BMW, Rolls-Royce, TRW, among others.