

Data Visualization

Group classes in NYC and onsite training is available for this course. For more information, email corporate@nobledesktop.com or visit: <https://www.nobledesktop.com/classes/data-visualization>



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Course Outline

Examples of Data Visualization

- The Problem with Data Visualization
- Graphical Perception
- The Science of Human Graphical Perception
- The Elementary Perceptual Tasks
- How Good is Your Graphical Perception?
- 5 Questions to Ask
- The Ranking of the Elementary Perceptual Tasks
- Identify the Elementary Perceptual Tasks

Redesigning Charts

- The Golden Rule of Data Visualization
- Graphical Excellence
- Graphical Distortion
- Graphical Integrity: The Lie Factor
- Exercise: Calculate the Lie Factor
- Labelling & Annotation
- Data Variation vs. Design Variation
- The Problem with Dimensions
- Some Advice Regarding Dimensions

The Data-Ink Ratio

- Data Density
- Proportion & Scale

Statistical Traps: How Not to Fall in Them

- Correlation Doesn't Sell Newspapers
- Selection Bias & Data Attrition
- The Importance of Context
- The Incorrect Normalization of the Data

- The Simpson's Paradox

Plots: Find the Correct Plot for Your Data

- Types of Plots
- Plotting Distributions
- Plotting Relationships Between Variables
- Plotting Rankings
- Comparing Part to Whole
- Plotting Spatial Data: Maps
- When is it Okay to Cut the Y-Axis?
- Shading the Area of a Line Plot
- The Spaghetti Chart
- Error Bars & Dynamite Plots
- How to Choose the Right Colors
- Common Mistakes with Color