Contents

Syllabus

Data Visualization Module

Lecture 1: Introduction to the course

Introduction to the Data Visualization module; textbooks; definitions and terminology; visual perception; pre-attentive attributes; Gestalt principles

[21/02/2024] [**slides**]

reading material: Chapter 1 (Munzner 2014)

Lecture 2: Nested model

Analysis framework: nested model; data abstraction (what); common types of data; task abstraction (why)

[28/02/2024] [**slides**]

reading material: Chapter 2,3,4 (Munzner 2014)

resources: Tamara Munzner, Visualization Analysis & Design class, 2021 video Chapter 2; video Chapter 3; video Chapter 4

Lecture 3: Visual encoding

Visual encoding; marks and channels; color in visualization; color palette; color deficiency; color spaces

[06/03/2024] [**slides**]

reading material: Chapter 5: Marks and Channels, Chapter 10: Map Color and Other Channels (Munzner 2014)

resources: VizPalette

Lecture 4: Common charts

Visualize tabular data; common visual idioms and charts; scatterplot; (stacked) bar chart; streamgraph; dot/line chart; Gantt chart; slopegraph; heatmap; radial bar chart; star plot; radar plot; pie chart; coxcomb chart; parallel coordinates; dual-axis charts; Visual vocabulary

[13/03/2024] [**slides**]

reading material: Chapter 7: Arrange Tables (Munzner 2014)

resources: Visual Vocabulary

Munzner, T. 2014. *Visualization Analysis and Design*. AK Peters Visualization Series. CRC Press. https://books.google.it/books?id=dznSBQAAQBAJ.