Chapter 1, TUFTE STYLE GRIDDING FOR READABILITY

Chapter 5, SLICE (CROSS-SECTIONAL VIEWS)

Distribution of ethnicities in each income group of SF bay area residents

- Other
- White
- Pacific Islander
- Hispanic
- East Indian
- Black
- Asian
- American Indian

Thicker grid lines to separate categories with one missing bound

Use of user driven orthogonal slicer with the MRI dataset

Chapter 1, DESIGNING MULTIGRAPH LAYOUTS

Chapter 2, BOXPLOTS

Apple Inc Stock Price, (detailed view of data from selected time window)

Gene Expression levels

Boxplot showing the gene expression across 198 samples for a specific gene across 14 cancers

pancreas lymphoma melanoma prostate bladder uterus renal ovary breast leukemia meso collerectal lung cns

Fatality Location Cancer
Chapter 3, TWO DIMENSIONAL SCATTER PLOTS

1 of the 3 iris classes is separable based on these 2 attribute values:

- **x** (Attribute 2, Sepal width)
- **y** (Attribute 3, Petal length)

Chapter 2, SPARKLINES

SparkLines with Stock Prices (1/1/2011 to 12/31/2011):

- AAPL: 0.95673
- GOOG: 0.99886
- MSFT: 0.89965
- SLB: 0.70779
- YHOO: 0.86663
- S&P: 0.925
- GE: 0.83705

Chapter 3, SCATTER PLOT SMOOTHING

Scatter plot smooth, sigma = 0.1, on a 100 x100 grid

Chapter 6, FUSING HYPERSPECTRAL DATASETS

False Color image showing the hyperspectral data from 72 spectral bands, from the 2010 oil spill in the Gulf of Mexico, collected at 2.2m GSD, covering 390-2450nm, from SpecTIR.
Chapter 3, TWO-DIMENSIONAL SCATTERPLOTS

Chapter 2, NODE LINK PLOTS

Chapter 2, DISTRIBUTIONAL DATA ANALYSIS (QQ PLOTS)

Chapter 2, TIME SERIES ANALYSIS (POWER SPECTRUM PLOT)
Chapter 2, CALENDAR HEAT MAP

Chapter 3, CHOROPLETH MAPS

Chapter 3, 2D NODE LINK PLOTS

Chapter 3, DENDOGRAMS AND CLUSTERGRAMS

Age adjusted rate of incidence of cancer across all races from 2003 - 2007

Rate is reported as number per 100,000 population

Age adjusted rate of occurrence of cancer across all races from 2003 - 2007

Leukaemia

Samples

30 different genes
Chapter 3, CONTOUR PLOTS

Contour lines, using a topological colormap
Contours show elevation beyond 1000 ft, at 100 ft interval
Thick contour at sea level delineate land from sea

Figure shows the confidence levels for data modeled with a Gaussian function.
The distance from the center is inversely proportional to the confidence level.
Figure colors the regions of the graph with high confidence level with enhanced granularity, using a non-uniform color map.

Chapter 3, THEMATIC MAPS WITH SYMBOLS

A topographical map of the Himalayan region
Arrows show the gradient (magnitude and direction);
Contour lines join areas of equal elevation

Chapter 5, LIGHTING
Chapter 3, FLOW MAPS
A flow map to show an itinerary for touring Italy
Path Color shows: ROAD TRAIN AIR

Chapter 5, ISOSURFACE, ISONORMALS, ISOCAPS
Use of isosurface, isonormals, isocaps and Phong lighting algorithm with the MRI dataset.

Chapter 7, THE MAGNIFYING GLASS DEMO

Chapter 4, INTERACTION BETWEEN LIGHT, TRANSPARENCY, AND VIEW
The Klein Bottle with surface transparency proportional to y coordinate. Two light sources have been used.
Chapter 4, TRANSPARENCY

Transparency and color used to encode same information: the higher the magnitude, the less transparent is the datapoint. Data was obtained from the Westerbork Synthesis Radio Telescope (WSRT) in the Netherlands, recorded in the radio frequency (327 MHz) range.

Chapter 5, SCALAR AND VECTOR DATA WITH A COMBINATION OF VISUALIZATION TECHNIQUES

Wind flow data using isosurface, isocaps, slice contourslice, transparency, coneplots (showing wind direction) streamlines, streamtubes, lighting

Chapter 5, 3D SCATTER PLOTS

3D scatter plot with electron hopping probability cloud at each point in a lattice. Probability directly proportional to cloud size and color, inversely proportional to transparency.

Chapter 6, TREE MAPS

Tree map representing the Gross Domestic Product across 100 countries.
Chapter 5, CAMERA MOTION

Chapter 7, STREAM PARTICLE ANIMATION

Chapter 6, ANDREWS’ CURVES

Chapter 7, OBTAINING USER INPUT FROM THE GRAPH

Chapter 6, RADIAL COORDINATES

Figure shows this data is not separable in 2D space.