Seeing through the Haze

Advanced Visualizations using Python

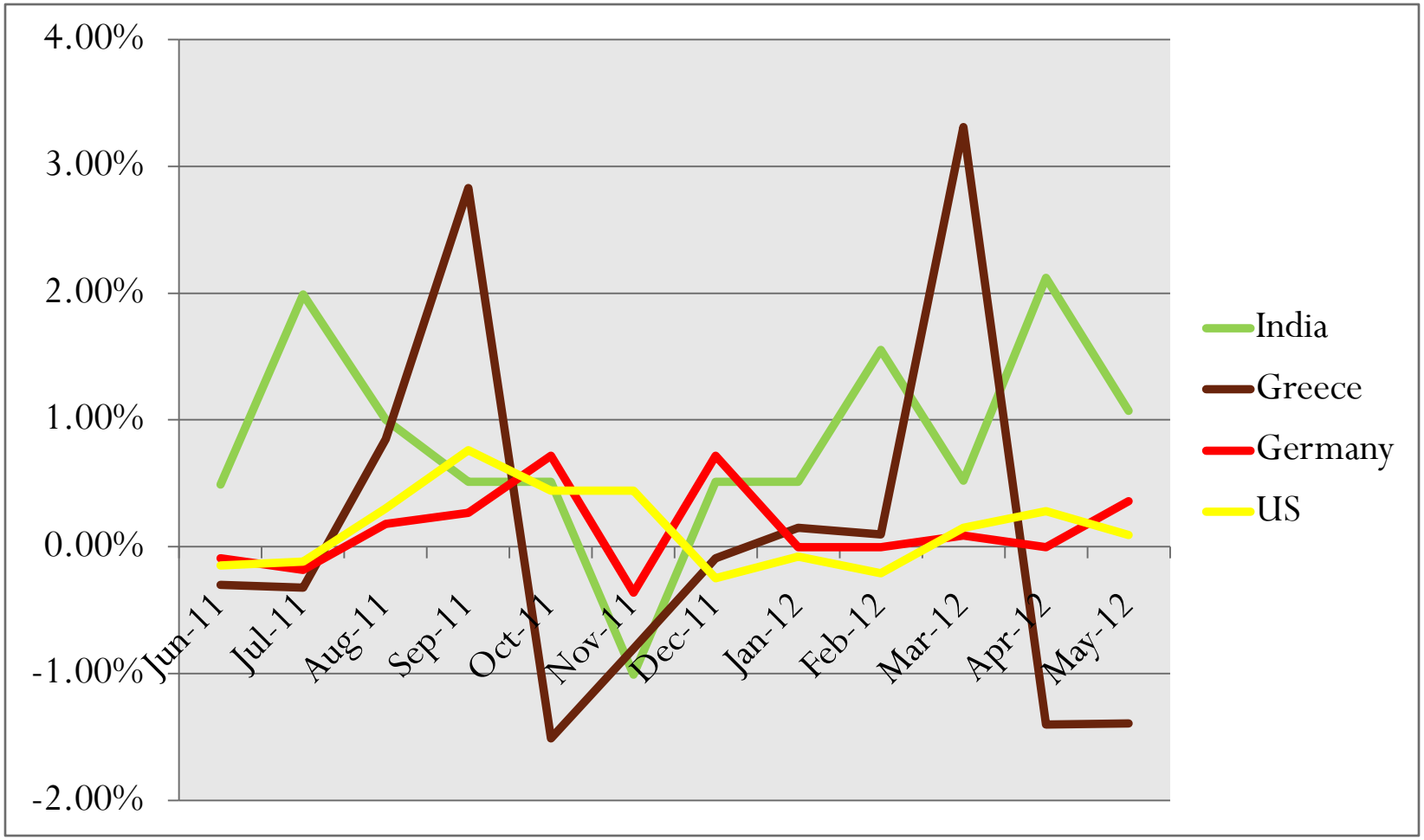
The Data Revolution

- Social networks
- System generated data
- Financial Data
- Open Data – Government Data
- Audio data
- High resolution videos

Tabular Data

	India	Greece	Germany	US
May-12	1.07%	-1.39%	0.36%	0.09%
Apr-12	2.12%	-1.40%	0.00%	0.28%
Mar-12	0.52%	3.31%	0.09%	0.15%
Feb-12	1.55%	0.10%	0.00%	-0.21%
Jan-12	0.51%	0.15%	0.00%	-0.08%
Dec-11	0.51%	-0.09%	0.72%	-0.25%
Nov-11	-1.01%	-0.80%	-0.36%	0.44%
Oct-11	0.51%	-1.51%	0.72%	0.44%
Sep-11	0.51%	2.83%	0.27%	0.76%
Aug-11	1.00%	0.85%	0.18%	0.30%
Jul-11	1.99%	-0.32%	-0.18%	-0.12%
Jun-11	0.49%	-0.30%	-0.09%	-0.15%

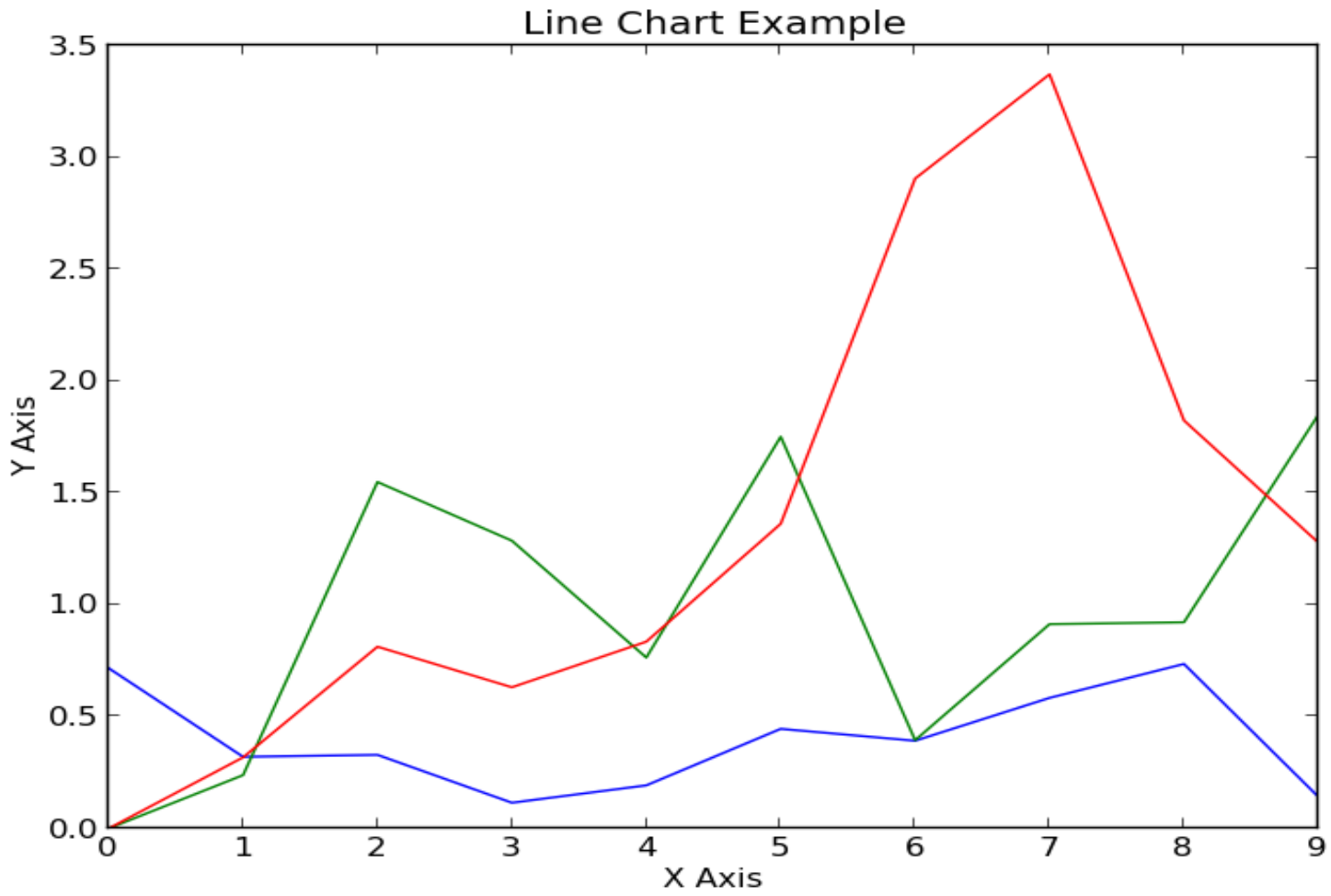
Visual Representation



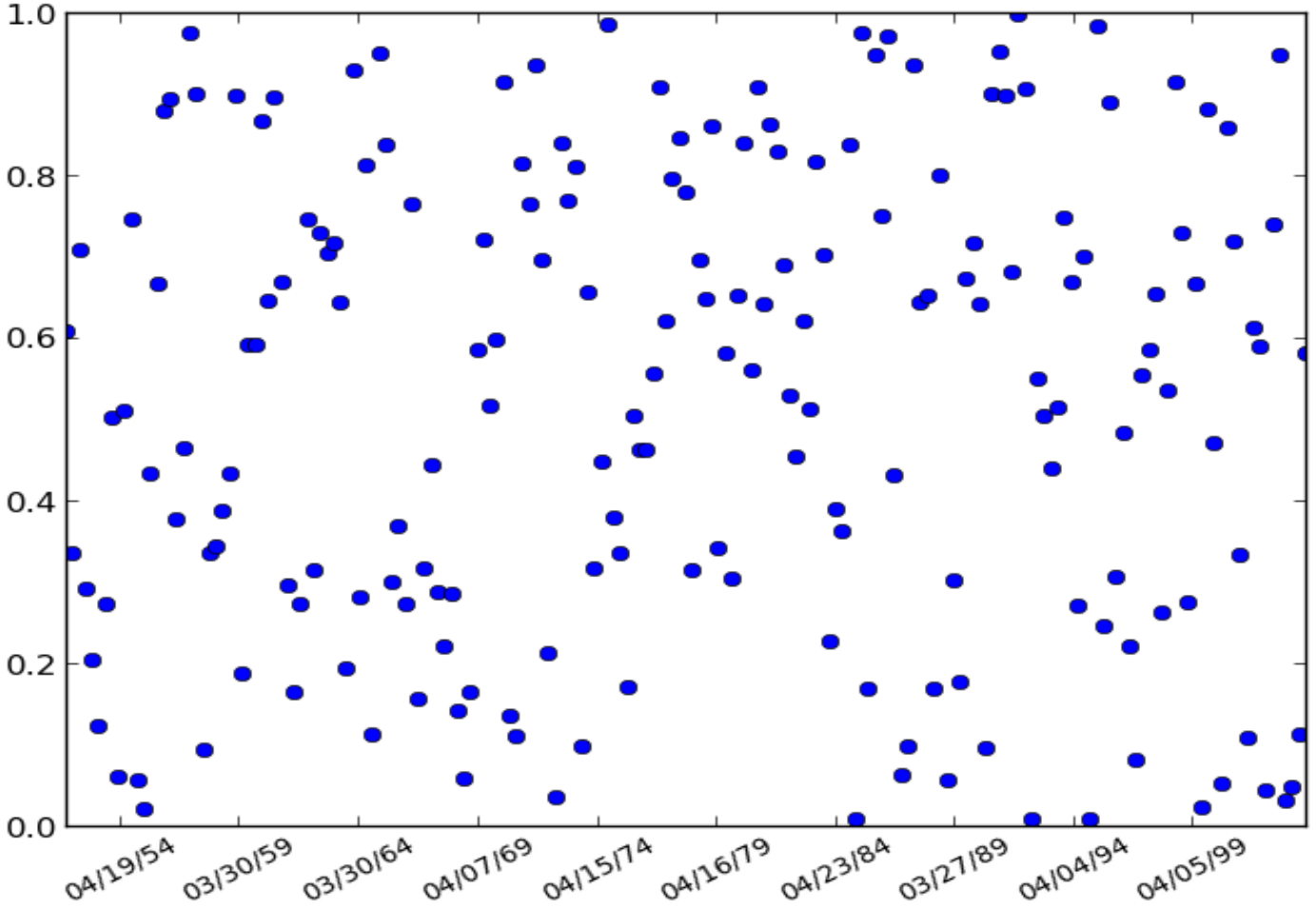
Use of Visualization

- Comparison
- Relationship
- Distribution
- Composition

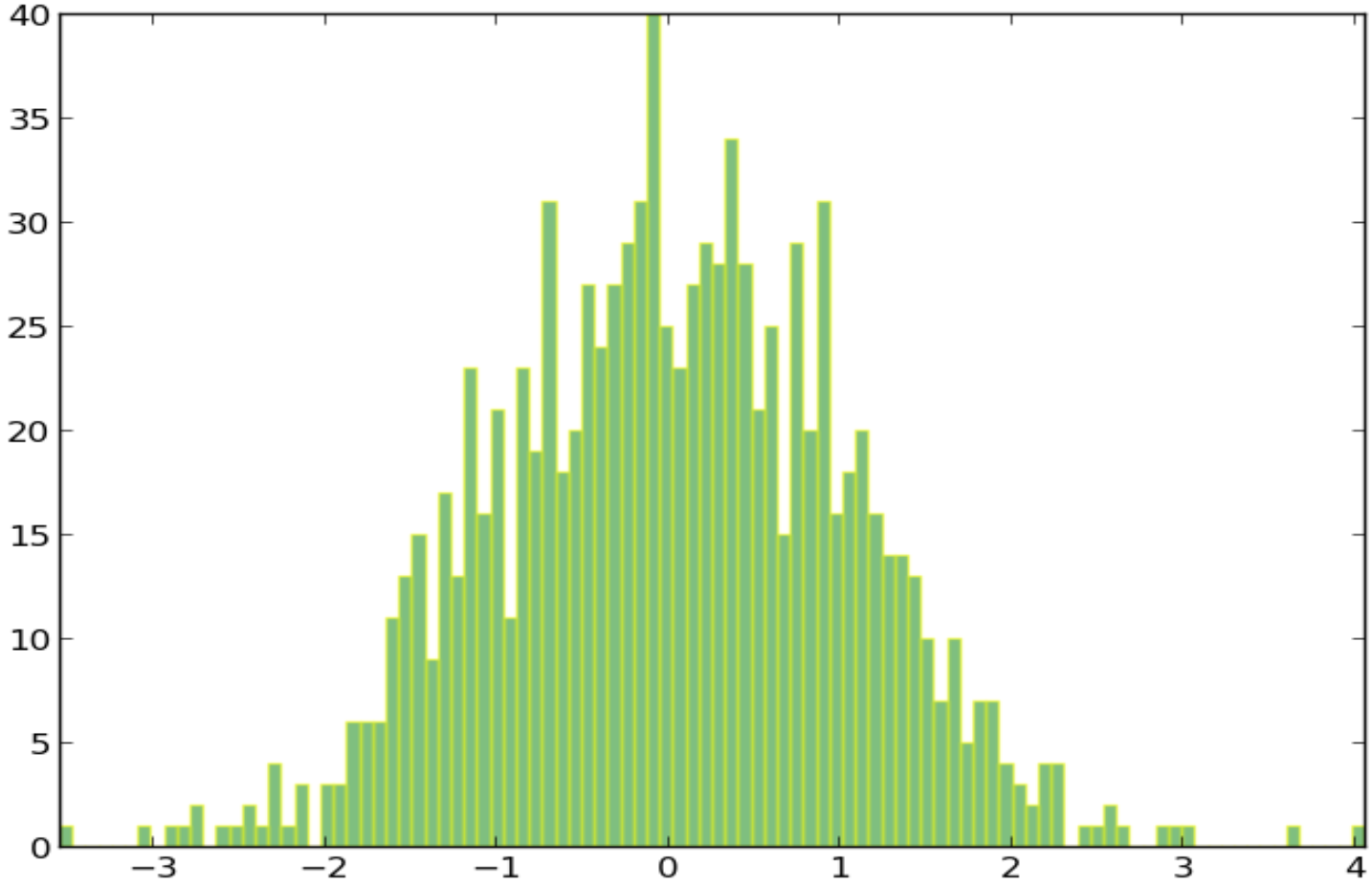
Comparisons - Line Chart



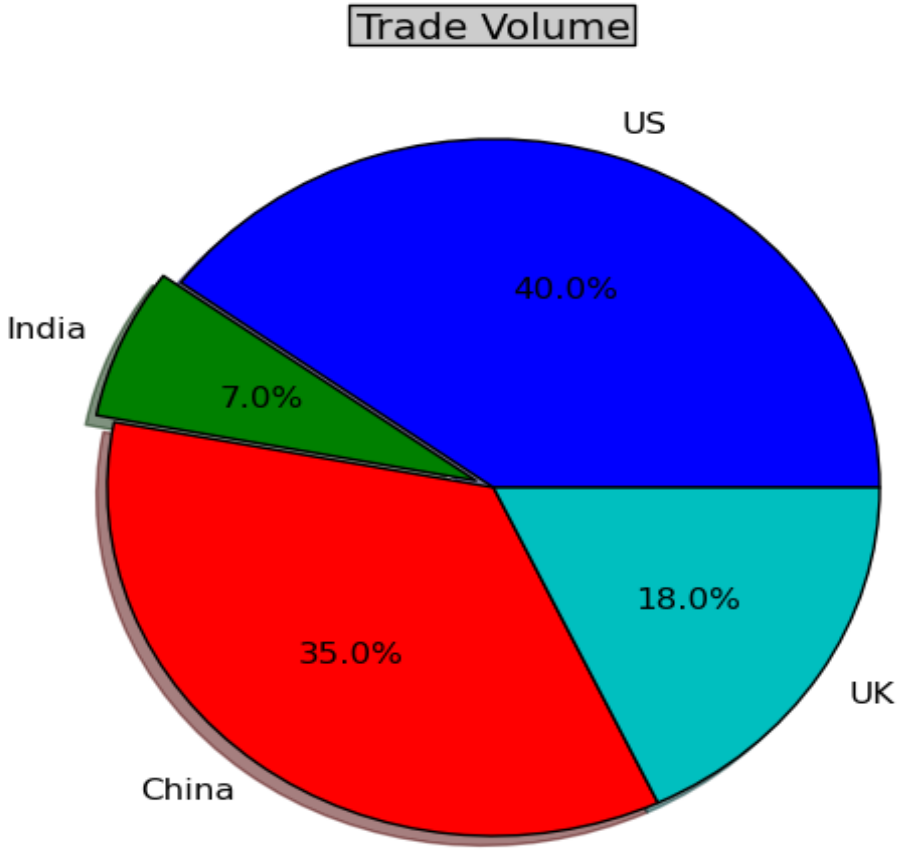
Relationship - Scatter Chart



Distribution - Column Histogram



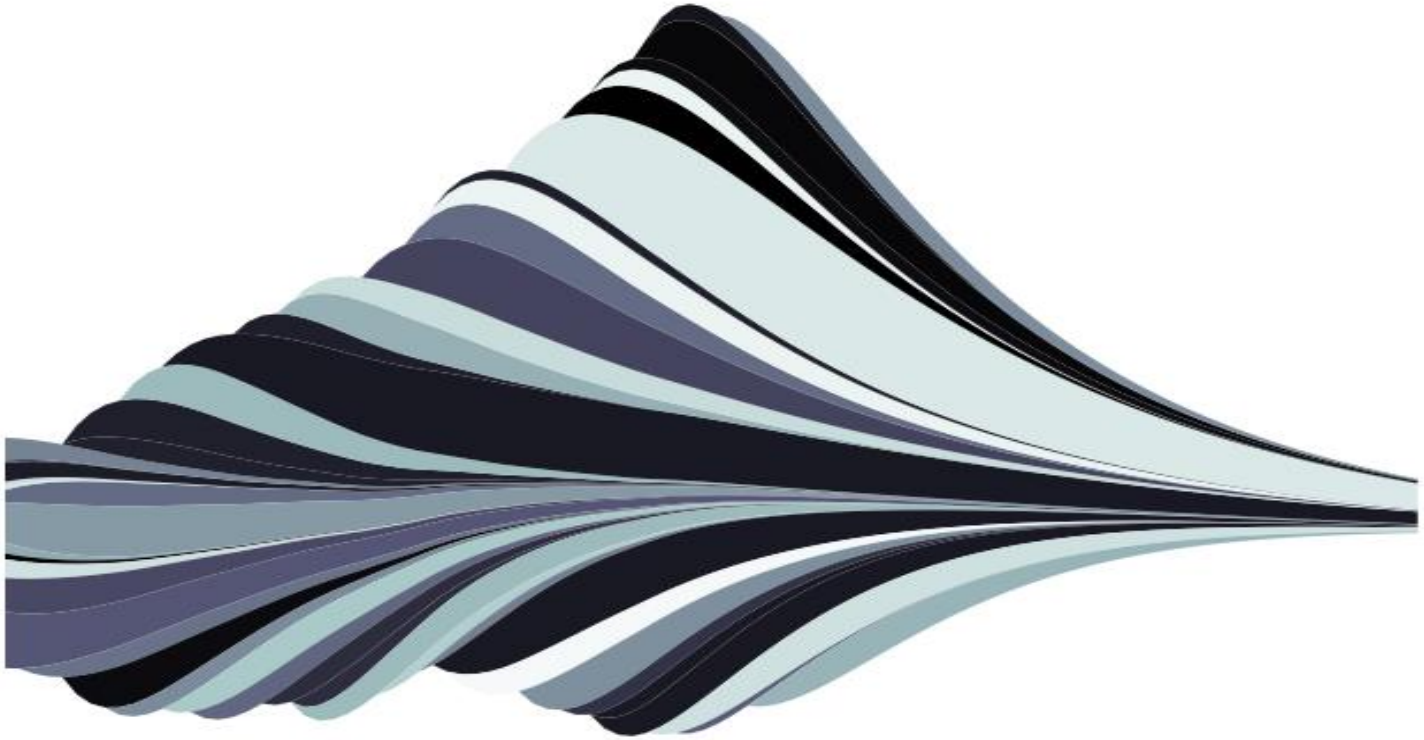
Composition - Pie Chart / Stack Graph



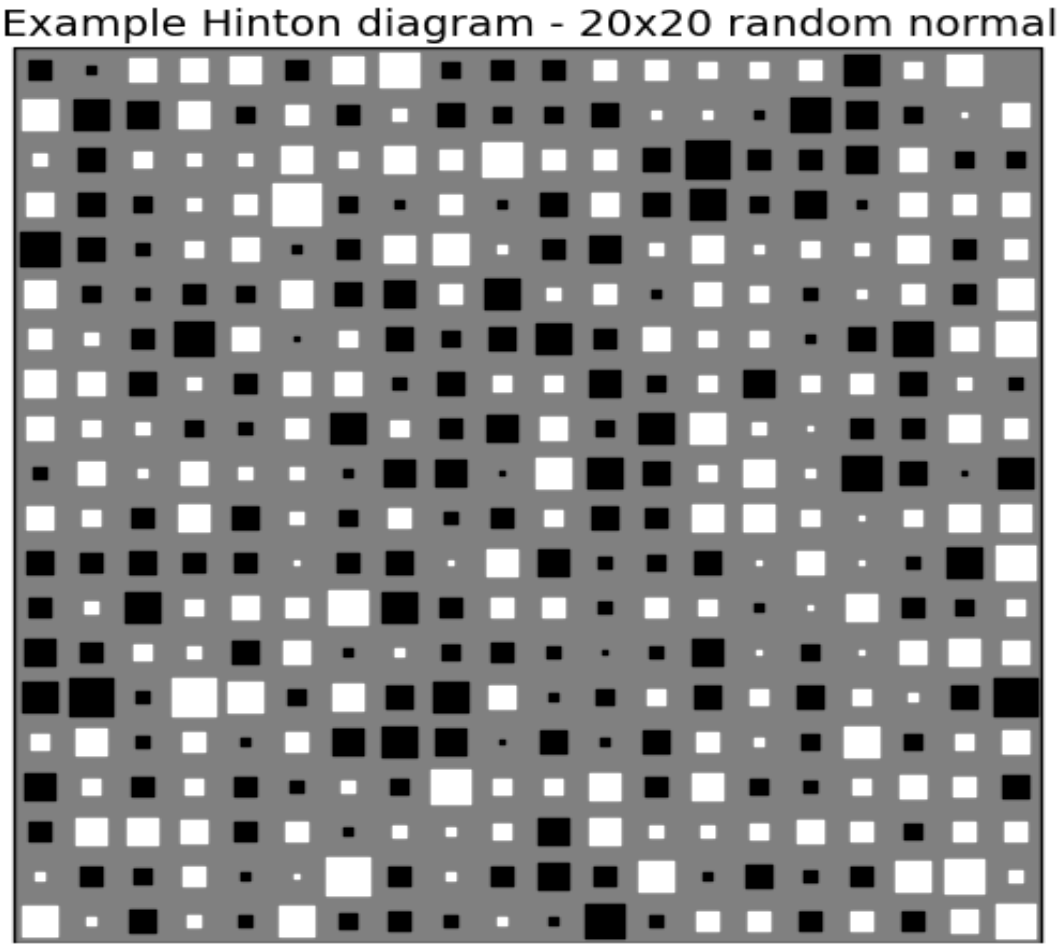
Advanced Data Visualisation

- X-axis
- Y-axis
- Z-axis (3D Plots)
- Colour + Gradient
- Size of elements
- Composition of elements
- Animation

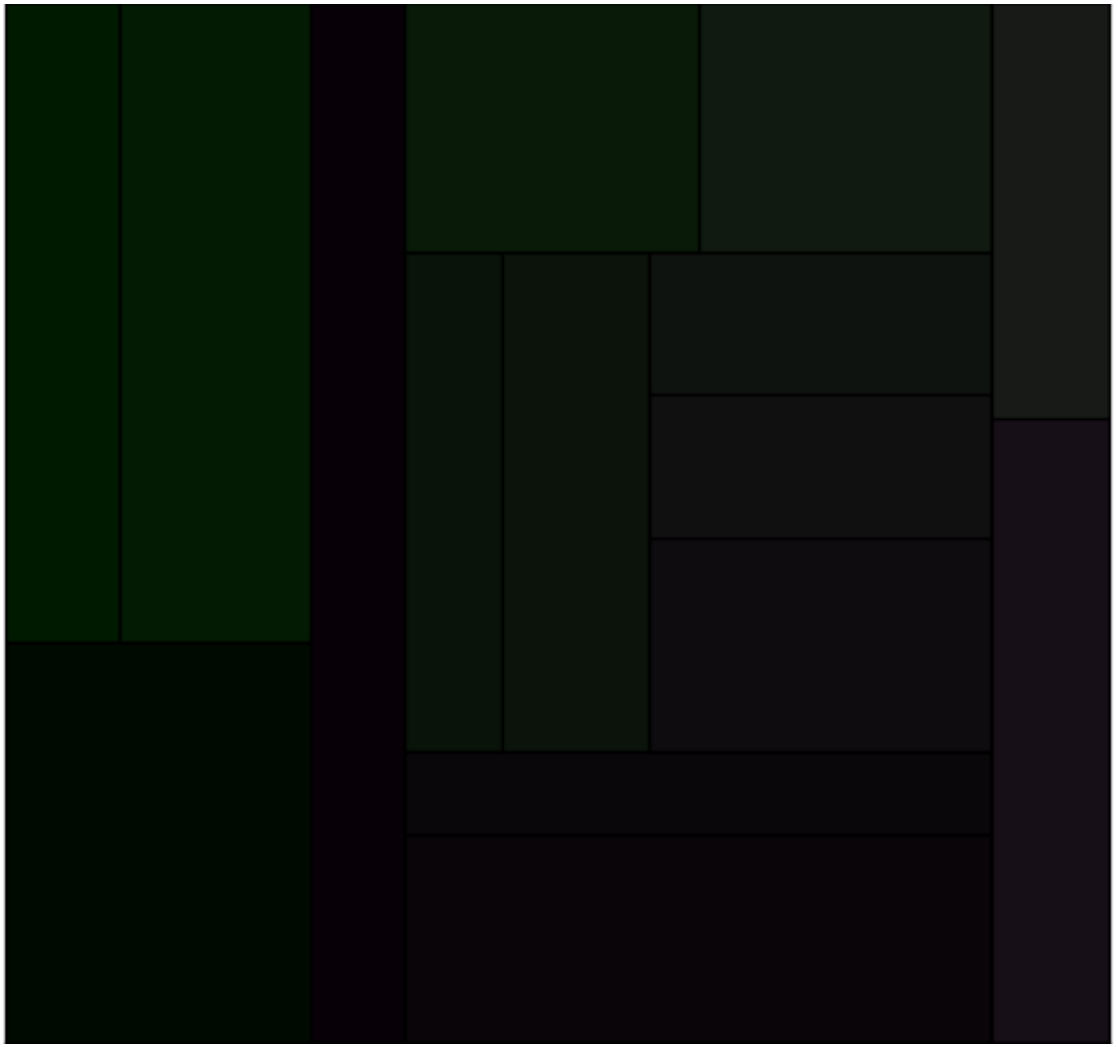
Streamgraphs



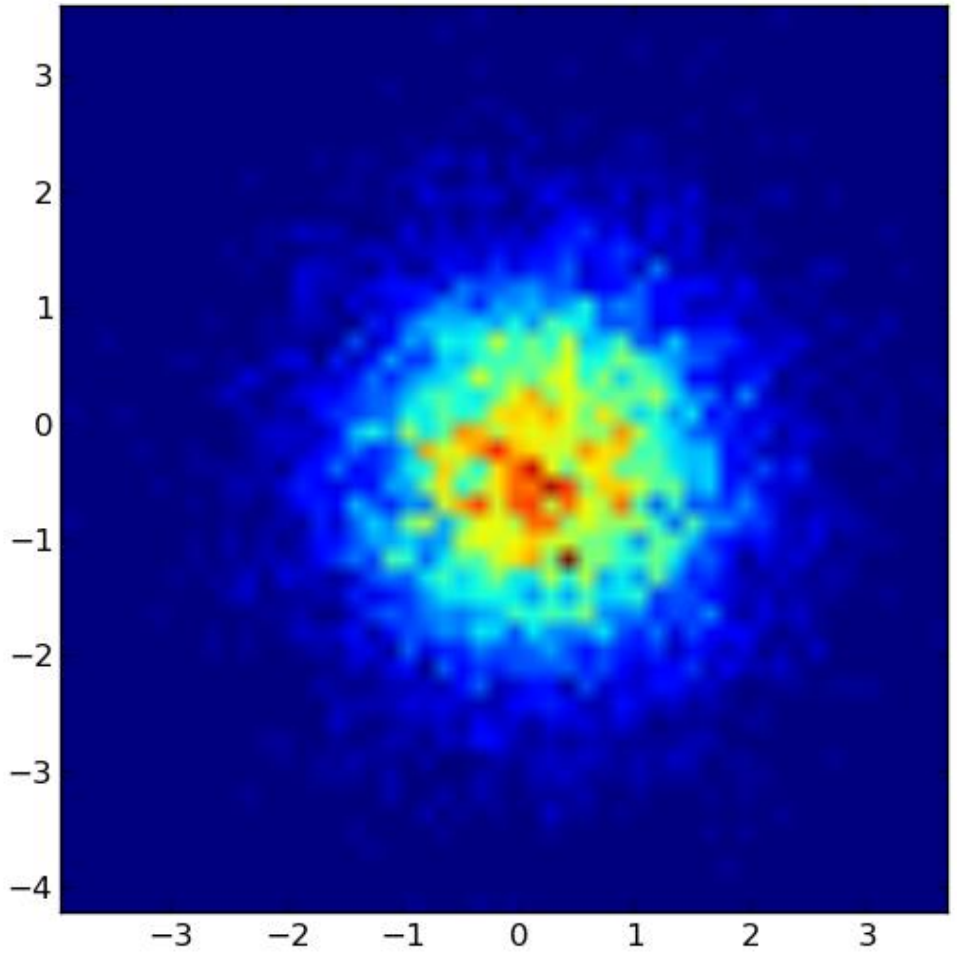
Hinton Diagrams



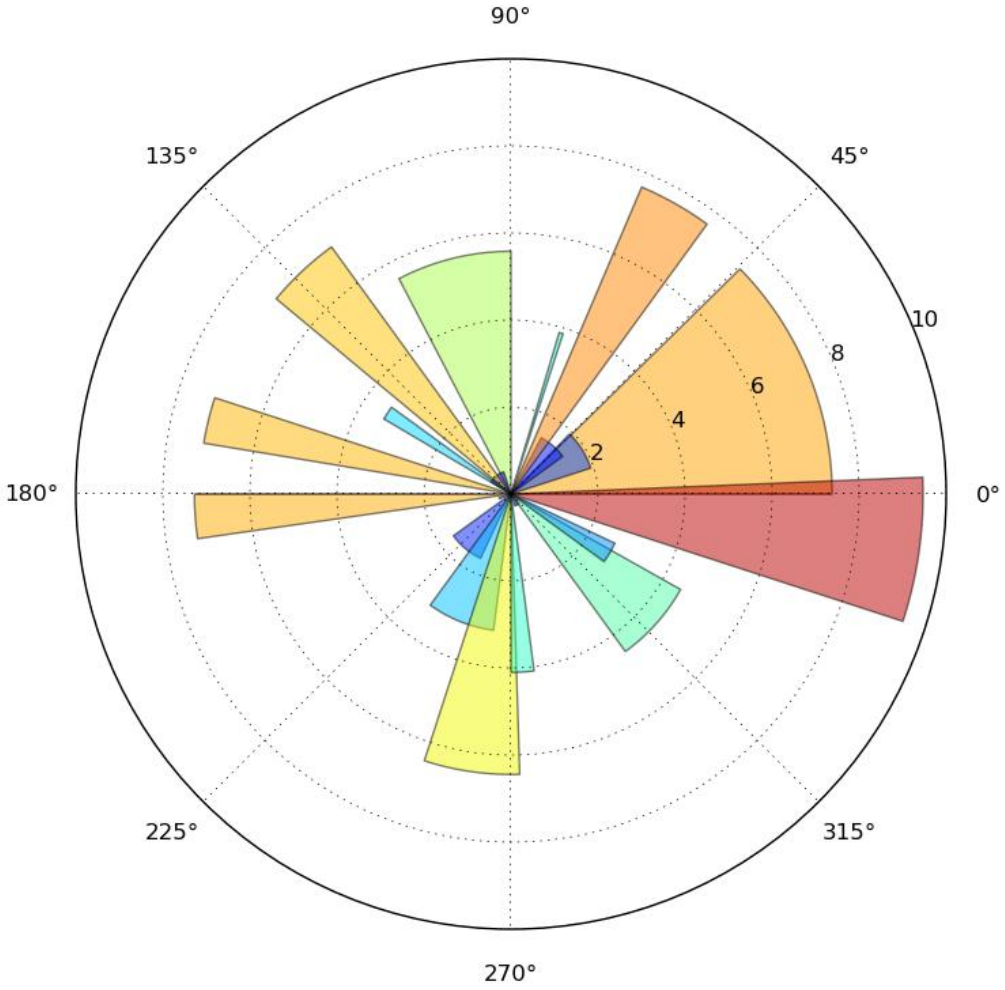
Treemaps



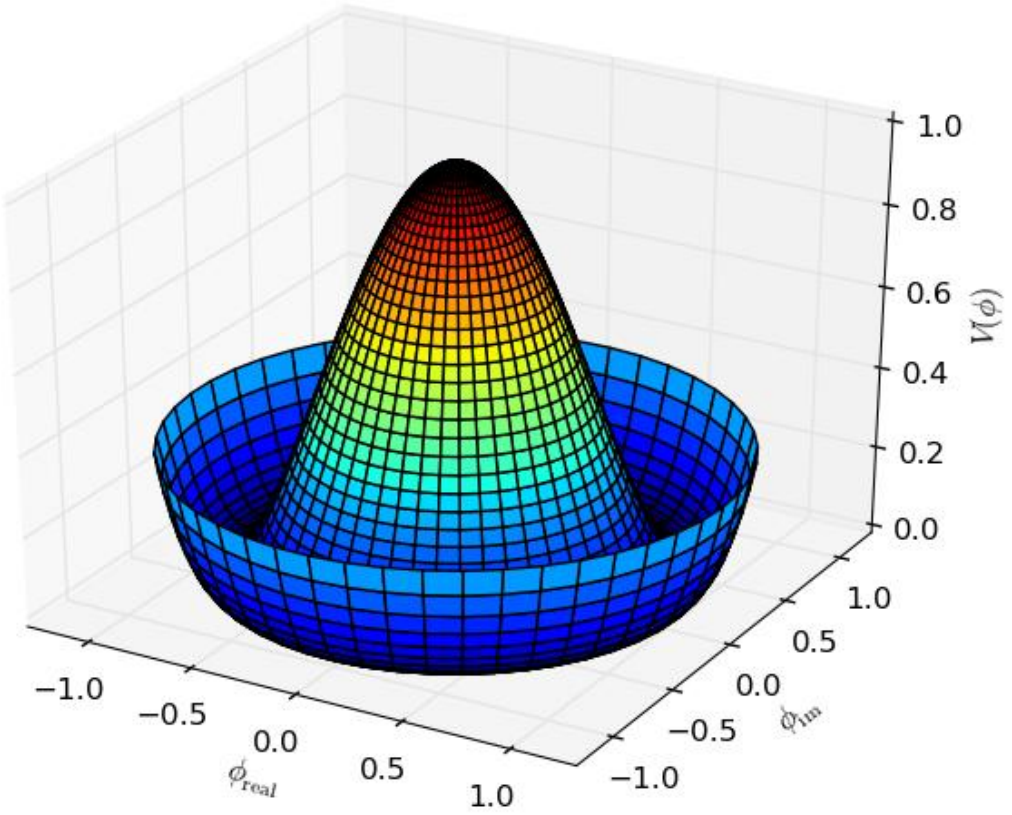
Heatmaps



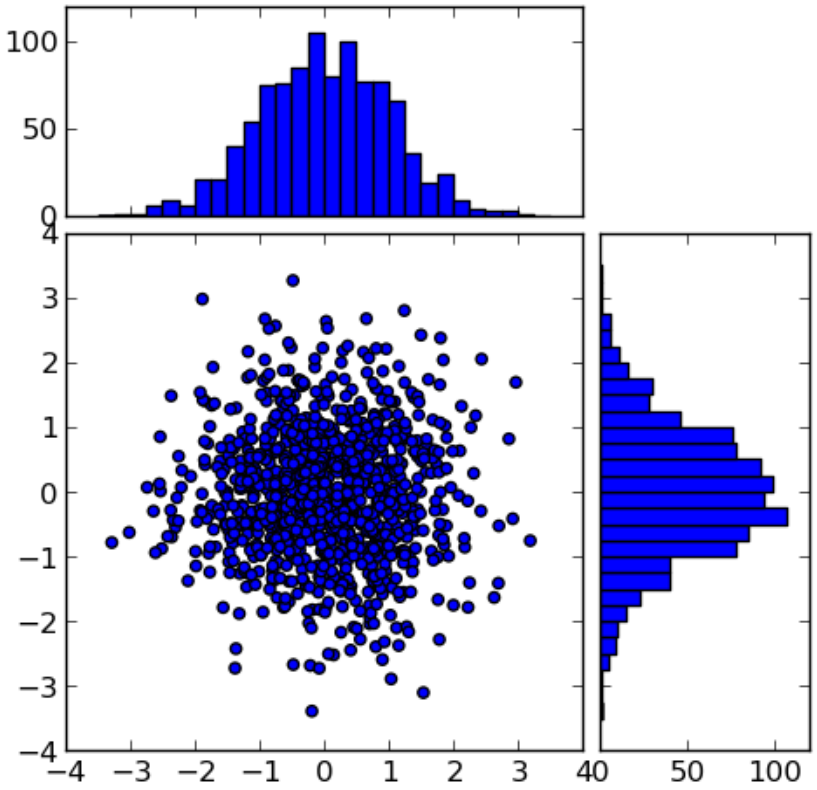
Polar Plot



3D-Contour Maps



3D Charts - Projections



Thank You