Data Mining with the Right Side of the Brain: Interactive Dynamic Graphics for Data Analysis

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Objectives

• Understand the meaning of terms “interactive” and “dynamic”.

• See the use of interactive and dynamic graphics in a variety of applications.

• Understand that it is possible to incorporate inference with graphics.

• Understand that graphical methods can allow us to extract features in data, such as local anomalies and unusual structure, more easily than is possible with non-graphical methods.

• Learn where to go to find more information on these methods.

• Get excited enough to try these methods “at home”.

Outline

1. Introduction
2. Presence of Missing Values
3. Clustering and Classification
4. Presence of Space/Time Variables
5. Categorical Variables and ANOVA
6. Proximity Analysis and Graph Layout with MDS
7. Inference for Data Visualization
8. Large Data
9. Summary