

Information Visualization

Yizhou Yu
Spring 2010

Class Format

- Lectures
 - ~7 weeks
- Student Paper Presentations
 - ~7 weeks
- Final Project Presentations
 - 1 or 2 classes

Syllabus I

- Data Mining and Information Visualization
- Info Vis Topics
 - Charts and Graphs
 - Hierarchical Structures
 - Cone Trees, Tree Maps
 - Graph Drawing
 - Force Directed Placement, Multiscale Graph Drawing
 - Network Visualization
 - Focus+Context
 - Table Lens, Hyperbolic Trees
 - Database Visualization
 - Small Multiples (Polaris, etc.)

Syllabus II

- Data Mining Topics
 - Clustering
 - Multidimensional Scaling
 - Dimension Reduction
 - Pathfinder Network Scaling
 - Anomaly Detection
 - Data Cubes and OLAP

Grading

- Paper Presentation
 - 30%
 - At least 50 minute long
- Projects & Presentation
 - 50%
- Class Participation
 - 20%