

Outline

CS376 Computer Vision

Wednesday, Feb 9, 2011

Segmentation and grouping

Review questions on texture and color

Grouping problems in vision

Inspiration from human perception, Gestalt properties

Bottom-up segmentation via clustering

- Mode finding and mean shift:
 - k-means: algorithm definition, pros and cons
 - Examples of feature spaces: color, intensity,...
 - Texton histograms; clustering for feature space quantization
 - Mean-shift: algorithm sketch, pros and cons
- Graph-based:
 - Images as graphs, measuring affinity between nodes
 - Minimum cut
 - Normalized cuts; objective definition, pros and cons

Summary

Reminder: Pset 1 is due Monday 11:56 pm