

Outline

CS376 Computer Vision

Wednesday, Feb 2, 2011

Texture

What is texture? What is it useful for?

Psychophysics of texture, “Textons” as primitive units of texture

Texture representation

- Detect local patterns
- Describe their statistics
 - Example with gradients
- Compute distances in texture descriptor space
- Scale of a texture pattern
- Filter banks
 - Example application
 - Name that filter bank response
- Applications of texture representations

Non-parametric texture synthesis

- Markov chains, Markov random fields
- Text synthesis example
- Analogy for texture generation in images
- Image quilting extension
 - Minimum error boundary computation

Summary

Reminder: Pset 1 due Feb 14.