Human-Centered Content-Based Image Retrieval

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HSI color space segmentation based on experimental data concerning human 11 color categories

1. Visual representation of experimental data on human color categorization
2. Clusters of categorized data
3. Filled clusters
4. Weighted Distance Map
5. Edge extraction: Borders between color categories

* Created by Fast Exact Euclidean Distance (FEED) transforms

Recall & Precision of 4 CBIR systems

Human color and texture categorization/classification

Image segmentation by agglomerative merging

Shape extraction by pixelwise classification

Parallel-sequential colorful texture analysis
- Optimal utilization of color information by human 11 color categories
- Color histogram and Color correlogram combined
- 94% correct classification
- 91% decrease in computational complexity

CBIR Benchmark

More information?
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