

# 1

# Overview of CBIR

Wei-Ta Chu

Y. Rui, T.S. Huang, and S.-F. Chang, “Image retrieval: current techniques, promising directions, and open issues” *Journal of Visual Communication and Image Representation*, vol. 10, pp. 39-62, 1999.

# Image Retrieval

2

- Image retrieval has been an active research area since 1970s, with the thrust from the research communities of database management and computer vision.
- Text-based approaches
  - ▣ Annotate images by text
  - ▣ Use text-based database management systems to perform image retrieval

# Needs of Content-based Image Retrieval

3

- In the early 1990s, two difficulties arise largely
  - ▣ Vast amount of labor required in annotating large-scale image collections
  - ▣ Rich content in the images and the subjectivity of human perception
- Instead of annotating by text-based keywords, images are indexed by their own visual content, such as color and texture.

# An Image Retrieval System Architecture

4

