Abstract

The increased in availability and usage of on-line digital video has created a need of automated video content analysis techniques, including indexing and retrieving. Automation of indexing significantly reduces the processing cost while by minimizing tedious work. Traditional video retrieval methods based on video metadata, fail to meet technical challenges due to large and rapid growth of multimedia data, demanding effective retrieval systems. One of the most popular solutions for indexing is extracting the features of video key frames for developing a Content Based Video Retrieval (CBVR) system. CBVR works more effectively as these deals with content of video rather than video metadata. Various features like color, texture, shape can be integrated and used for video indexing and retrieval. Implemented CBVR system is experimented based on integration of texture, color and edge features for video retrieval. Entropy is a texture descriptor used for key frame extraction and video indexing. However entropy, color (RGB) and edge detection algorithms are used for video retrieval. These features are combined in various ways like entropy- edge, entropy- color for result refinement. Dataset is created with the videos from different domains like e-learning, nature, construction etc. By the combination of these features in different ways, we achieved comparative results. Obtained
result shows that combining of two or many features gives better retrieval.

References

- Rong Zhao, "Video shot detection using color anologram and latent Semantic Indexing: from Content to Semantics", citeseerx.ist.psu.edu.

Index Terms

Computer Science

Keywords

CBVR  CBVI  Video indexing  Video retrieval