Abstract

Acquiring the video information based on user requirement is an important research, that attracts the attention of most of the researchers today. This paper proposes an unsupervised shot transition detection algorithm using Autoassociative Neural Network (AANN) for retrieving video shots. The work further identifies the type of shot transition, whether abrupt or gradual. Keyframes are extracted from the detected shots and an index is created using k-means clustering algorithm for effective retrieval of required shots based on user query. The approach shows good performance in retrieving the shots, tested on five popular genres.
Unsupervised Approach for Retrieving Shots from Video


Index Terms

Computer Science Pattern Recognition

Keywords
Shot transition detection  Autoassociative neural network  kmeans clustering
algorithm  Shot retrieval