

# A Survey on Different Approaches of News Video Mining

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**Abstract**—On account of the utilization of information technology and the recent developments in multimedia frameworks, the measure of interactive media information accessible to clients has expanded exponentially. Video is a case of mixed media information as it contains a few sorts of information, for example, content, picture, information, visual and sound. The proposed approach is tried and discovered news extraction. With the always developing advanced libraries and video databases, it is progressively critical to comprehend and mine the information from video database naturally. In light of the innovative work in the previous years, utilization of affiliation lead mining is developing in various areas, for example, reconnaissance, gatherings, sports, motion pictures and additionally individual and online media accumulations.

**IndexTerms**—news extraction, Text detection and reorganization, ad detection, key frame extraction, Edge Detection, text localization.

## I. INTRODUCTION

Presently a day's the greater part of the people groups are working and everybody is intrigued to realize what is going on in the general public by viewing the TV news program. All the more essentially the TV channels are expanding their TRP rate because of couple of serials and news. The time they achieve the home with terrifically critical projects were wind up at that point. To bolster this sort of individuals now a days the TV's are connected with capacity gadgets like Sun Direct, Dish TV, Big TV, Airtel, Tata Sky, Videocon DTH, however the issue with this stockpiling gadget is that they will store the whole program. This incorporates program alongside notice and commentators, grapples data observing all in that time is impractical, so they can't see the whole projects because of deficiency of time.

Broadcasting of Entertainment and commercial data might be as far as sound, video, video content. In digital broadcasting and net technology, smart television which integrates the internet into virtual tv set-top boxes has become increasingly more famous. It allows visitors to go looking and find virtual videos, photos, and different contents at the internet or stored on a nearby tough pressure. For this reason, it is very vital to analyze and index such media for better information of contents. The related research problems are automatic annotation, indexing, summarization, and retrieval of virtual videos. The leader goal of the research is to index video records efficiently, make it a well-structured media form, and provide viewers with clever content-based totally browsing and retrieval capabilities.

## II. RELATED WORK

Puttaswamy, Punith[1] made an attempt to include the video shot detection technique to TV storage devices, by means of shot detection techniques and are available two categories are Threshold based and Machine learning based method. Kannao [2] proposed a methodology for overlay text extraction in TV broadcast news videos. In the context of text detection and localization, significantly improved over existing edge density based methods. threshold free preprocessing scheme for suppression of non-text edges while boosting text edges. The effects of stronger edges coming from non-text regions are nullified further by using the first and second order derivatives of the edge density projection profiles while localizing the text bands. The detected text regions are tracked across the frames to extract the static and consistent text bands using a formal reasoning framework. The use of RCC-5 based reasoning framework allowed us to identify different problem cases in detection and tracking. Michele Covell and Shumeet Baluja[3] proposed method that allows advertisements to be removed and replaced with new ads in redistributed television material. Cheolkon Jung, Licheng Jiao[4] proposed a Korean-English bilingual videotext recognition method for news headline generation based on a split-merge strategy. Because special-characters have negative effects on the recognition performance, they are filtered before recognizing characters in the proposed method. Wang, Liu and Changsheng [5] generalized gradient based method can detect the logo region by tracking the change rate of pixels in spatiotemporal domain, and the region of logo removal is well filled in a structure-preserving way. Since temporal correlation of multiple consecutive frames is considered, the proposed method can deal with opaque, semi-transparent, and animated logos.

The experiments and comparison with previous methods are conducted on the part of TRECVID 2005 news corpus and several Chinese TV channels with challenging TV logos, and the experimental results are promising. Wei Qi, Lie Gu[6] integrated the image and audio analysis results in identifying news segments. Second, used the video OCR technology to detect text from frames, which provides a good source of textual information for story classification when transcripts and close captions are not available. Finally, natural language processing (NLP) technologies are used to perform automated categorization of news stories based on the texts obtained from close caption or video OCR process. Anubhav Kumar [7] In this paper, an effective methodology for text extraction images and video frames using Gabor filter is proposed.

### III. PROPOSED METHODS

News video mining is a popular research domain which helps to extract interesting knowledge from multimedia data sets such as audio, video, images, graphics, speech, text and combination of several types of data sets.

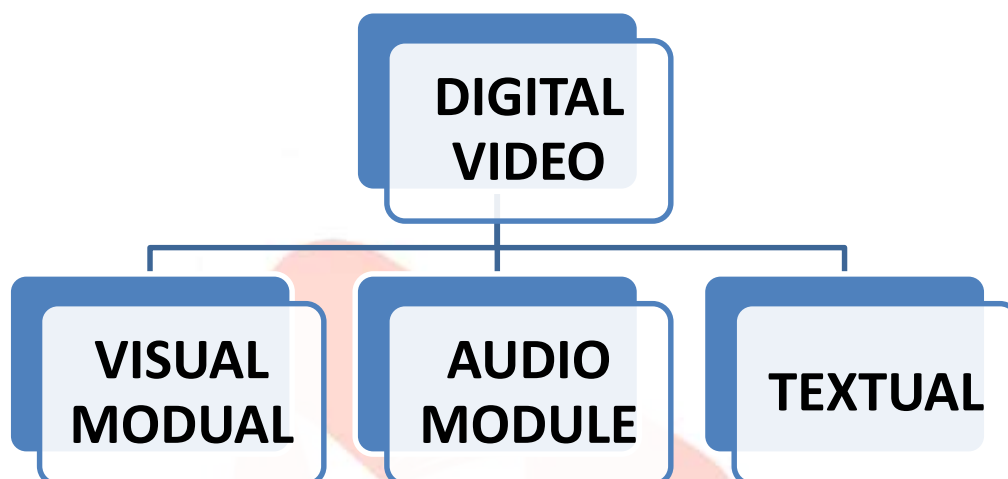


Fig. News video minig model

Key frame extraction is widely used for video summarization. The key frames are the characteristic frames of the video which render limited, but meaningful information about the content of the video. The researchers have attempted to exploit various features for the extraction of key frames in videos..

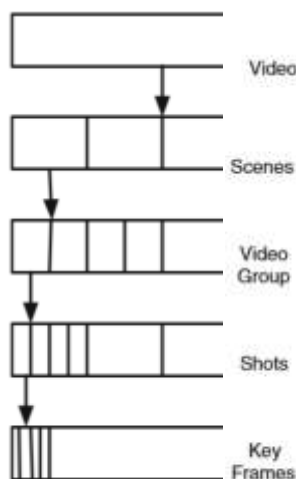


Fig. 1 Video hierarchy

#### IV. CONCLUSION

In recent years, We can condense news in various viewpoints. From exchange we can reason that news of an entire day or a previous week can be removed in various ways so we can see that news in brief time as far as pictures or content. We can see customized grapple news or particular kind of a news like climate news or breaking news. On the off chance that we can't see the news we can listen likewise with the assistance of sound extraction. For more exact extraction break recognition should be possible with the assistance of sound or logo of a news channel.

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