

## Automatic Video Classification: A Review

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### Abstract

**INTRODUCTION:** In last few years number of internet users and available bandwidth has been increased exponentially. The availability of internet with such a low cost is making audiovisual content a more popular and easier form of information exchange. The internet is having a huge amount of this audiovisual content and to classify and choose a particular type of video is becoming a difficult task. A number of video classification methods (like text, audio and video feature extraction) have been proposed by researcher's community

**OBJECTIVES:** This work is carried out to give a review of different video classification techniques and give a comparative analysis of available video classification techniques and to suggest the most accurate and efficient method of video classification.

**METHODS:** Text, Audio and Visual video classification techniques.

**RESULTS:** It has been observed that a combination of audio and visual feature extraction can provide better results.

**CONCLUSION:** There are various methods of video classification either by using text, audio or video extraction. The text feature extraction is the least used method of video classification. The audio and visual feature extraction is being used in various applications but as we can understand that both the audio and visual feature extractions are having equal importance in video feature extraction but if we use combination of both these approaches, the results in form of accuracy of video classification can be further improved.

**Keywords:** Video Classification, Audiovisual, Feature Extraction, Bandwidth, Analysis, Review.

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### 1. Introduction

Now days, people have access to a huge amount of video content over internet and it is becoming a difficult task to find a video of interest from these videos. This increase in popularity of audiovisual content has created a need of such a system which can classify the desired video class from those tremendous videos. There are different methods to classify these videos classification are Text based approach, audio based approach and video based approach and these days combination of audio-visual feature extraction is being used. The first one make use text information of given input video file, the second type uses audio part of the input video file and classifies the system based on its audio information while on the other

hand third method is to extract visual features of the input video file and categories that it belongs to which class. The combinational approach which is the recently developed type is based on the fact that both audio as well as visual part of any video contains almost equal information and both of them play an important role for video classification.

#### 1.1. Text based Approach

This is the body text with no indent. The text based approach is further divided into two parts the first one is closed caption and the other is optical character recognizer (OCR) based type. The closed caption technique makes use of speaker recognition method and extracts the text from the speech. By Closed captioning







