

**NEW WAVELET AND COLOR FEATURES FOR TEXT  
DETECTION IN VIDEO**

**PROJECT REPORT**

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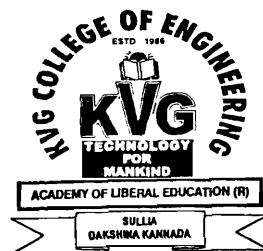
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# **ABSTRACT**

Text detection plays a major role in video indexing and information retrieval. With the rapid development of the digital devices, the images and video on the web and in databases are increasing rapidly. It is very essential to retrieve those texts automatically as it fills the gap of semantic information embedded in videos.

The proposed method is based on the wavelet decomposition and color features. The wavelet decomposition is applied for 3 color bands separately to obtain the 3 high frequency sub-bands. Next the result is preprocessed and binarized. Fuzzy C-means is applied to classify the detected region into two clusters: background and text candidates. Then, the projection profile analysis for the boundary refinement is applied to detect the boundary of the text block. The morphological operation is employed over the detected blocks to eliminate the false positives which are devised based on some geometrical rules. Further, segmentation is performed to detect the lines and characters. Finally, the segmented character is recognized using OCR. Experimental results show that the proposed method outperforms the existing method in terms of detection rate, false positive rate and misdetection rate.