Abstract

Video is one of the sources for presenting the valuable information. It contains sequence of video images, audio and text information. Text data present in video contain useful information for automatic annotation, structuring, mining, indexing and retrieval of video. Nowadays mechanically added (superimposed) text in video sequences provides useful information about
A Novel Method for Super Imposed Text Extraction in a Sports Video

their contents. It provides supplemental but important information for video indexing and retrieval. A large number of techniques have been proposed to address this problem. This paper provides a novel method of detecting video text regions containing player information and score in sports videos. It also proposes an improved algorithm for the automatic extraction of super imposed text in sports video. First, we identified key frames from video using the Color Histogram technique to minimize the number of video frames. Then, the key images were converted into gray images for the efficient text detection. Generally, the super imposed text displayed in bottom part of the image in the sports video. So, we cropped the text image regions in the gray image which contains the text information. Then we applied the canny edge detection algorithms for text edge detection. The ESPN cricket video data was taken for our experiment and extracted the super imposed text region in the sports video. Using the OCR tool, the text region image was converted as ASCII text and the result was verified.

Reference

Malobabić, Jovanka and O'Connor, Noel E. and Murphy, Noel and Marlow, Seán

Index Terms

Computer Science
Multimedia

Key words

Video Retrieval
Video Annotation
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summarization

Video text information and super imposed text