

NEWS VIDEOS ANCHOR PERSON DETECTION BY SHOT CLUSTERING

ABSTRACT

In recent years, extensive research efforts have been dedicated to automatic news content analysis. In this paper, we propose a novel algorithm for anchorperson detection in news video sequences. In this method, the raw news videos are firstly split into shots by a four-threshold method, and the key frames are extracted from each shot. After that, the anchorperson detection is conducted from these key frames by using a clustering-based method based on a statistical distance of Pearson's correlation coefficient. To evaluate the effectiveness of the proposed method, we have conducted experiments on 10 news sequences. In these experiments, the proposed scheme achieves a recall of 0.96 and a precision of 0.97 for anchorperson detection.

EXISTING SYSTEM

In this system, we propose a cross-view down/up-sampling (CDU) method for the framework of reduced resolution multiview depth video coding, which exploits cross-view information to assist the up-sampling at the decoder. In the down-sampling procedure of CDU, the odd-even interlaced extraction is employed to preserve more confident information of the original depth video with reduced resolution. In the decoder, the cross-view information is exploited for up-sampling the reconstructed depth video. An iterative interpolation process is proposed to eliminate the effect of compression distortion on this up-sampling. Experimental results demonstrate the gains of up to 3.88 dB for the proposed algorithm and better quality of synthesized views

DISADVANTAGES

- The computation cost on template matching is High.
- This method cannot have robust performance on handling the situation

PROPOSED SYSTEM

In this paper, we have proposed a novel anchorperson detection algorithm for news video sequences. In this method, news videos are firstly partitioned into shots, and keyframes are extracted from each video shot. These keyframes are further clustered based on a statistical distance of Pearson's correlation coefficient. Then the anchorperson shot is detected with learned criterions. To justify the performance of the proposed method, we have conducted experiments on a news video dataset including 10 news video sequences. Experimental results demonstrate that the proposed method is effective on anchorperson detection.

ADVANTAGES

- Allows us to identify and locate objects in an image or video.
- Track their precise locations, all while accurately labeling them.

SYSTEM REQUIREMENT:

HARDWARE REQUIREMENTS:

Processor : Intel
Ram : 2 GB (Minimum)
Monitor : 15" COLOR
Hard Disk : 500 GB
Keyboard : STANDARD 102 KEYS
Mouse : 3 BUTTONS

SOFTWARE CONFIGURATION:

Operating System : Windows 7 / 10
Environment : MATLAB
Matlab : Version 18a

REFERENCES

1. C.G. Snoek, M. Worring, Concept-based video retrieval, *Found. Trends Inf. Retr.* 2 (4) (2008) 215–322.
2. Y. Yang, Q. Dai, G. Jiang, Y.-S. Ho, Comparative interactivity analysis in multiview video coding schemes, *ETRI J.* 32 (4) (2010) 566–576.
3. S. Antani, R. Kasturi, R. Jain, A survey on the use of pattern recognition methods for abstraction, indexing and retrieval of images and video, *Pattern Recognition* 35 (4) (2002) 945–965.
4. Y. Gao, W.-B. Wang, J.-H. Yong, H.-J. Gu, Dynamic video summarization using two-level redundancy detection, *Multimedia Tools Appl.* 42 (2) (2009) 233–250
5. Q. Liu, Y. Yang, R. Ji, Y. Gao, L. Yu, Cross-view down/up-sampling method for multiview depth video coding, *IEEE Signal Process. Lett.* 19 (5) (2012) 295–298