CARTOON−RECOGNITION USING VIDEO & AUDIO DESCRIPTORS (ThuAmOR1)

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Abstract :

We present a new approach for classifying mpeg−2 video sequences as ‘cartoon’ or ‘non−cartoon’ by analyzing specific video and audio features of consecutive frames in real−time. This is part of the well−known video−genre−classification problem, where popular TV−broadcast genres like cartoon, commercial, music, news and sports are studied. Such applications have also been discussed in the context of MPEG−7 [12]. In our method the extracted features from the visual descriptors are non−linearly combined using a multilayered perceptron and then considered together with the output of the audio−descriptor to produce a reliable recognition. The results demonstrate a high identification rate based on a large collection of 100 representative video sequences (20 cartoons and 4*20 non−cartoons) gathered from free digital TV−broadcasting.

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