

A crowd video retrieval framework using generic descriptors

ABSTRACT

In the era of data mining and analytics, retrieval of crowd video with desired motion pattern segmentation plays a significant role in surveillance video management. The retrieval of crowd video with desired motion pattern segmentation poses challenges in finding generic descriptors to describe crowd patterns and similarity matching. This paper presents a novel crowd video retrieval framework using generic descriptors to overcome the above challenges. The anticipated structure comprises of four core components, namely motion feature extraction, group detection, learning generic descriptors, and crowd video retrieval. Results obtained indicate that the proposed framework can improve performance of crowd video retrieval compared with the existing crowd motions on CUHK Crowd Dataset.

Keyword: Crowd motion; Crowd scenes; Crowd video retrieval; Generic descriptor; Motion pattern segmentation