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A COMPARATIVE STUDY FOR HUMAN BASED KEYFRAME EXTRACTION FOR CRIME SCENE INVESTIGATION IN CCTV SURVEILLANCE

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ABSTRACT:

The crime scene investigation through surveillance has to recognize the human/object detection involved in the suspect. Due to the eruptive growth of the surveillance data, the requisite information of gathering the crime content from the surveillance effectively becomes a desperate problem. To solve this problem the content based video retrieval scores with the keyframe extraction provides an extensive attention for an effective solution. This paper reviews a comparative study on video human/object detection by various methods such as background subtraction, optical flow and spatio-temporal filter descriptors. The study proposes the detection by the pursue of obtaining the global and local motion state information of moving objects by the combination of spatio-temporal descriptors along with the methods of keyframe extraction results a summarized video. Thus, an optimal human based keyframe extraction method for crime investigations of suspecting the human by capturing their local motion state changes through spatio-temporal filter results with greater accuracy level.

KEYWORDS: CCTV Surveillance, Keyframe Extraction, Human motion detection, Background Subtraction, Spatio-temporal