

# Abstract

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## **detectiontracking of multiple moving objects with occlusion in smart video surveillance systems**

autonomous video surveillancemonitoring has a rich history. a new method for detectingtracking multiple moving objects based on discrete wavelet transformidentifying the moving objects by their colorspatial information is proposed in this paper. since discrete wavelet transform has a nice property that it can divide a frame into four different frequency bands without loss of the spatial information, it is adopted to solve this problem due to the fact that most of the fake motions in the background can be decomposed into the high frequency wavelet sub-band. in tracking multiple moving objects, many applications have problems when objects pass across each other. in this paper, we have developed robust routines for detectingtracking multiple moving objects with occlusion. the proposed model has proved to be robust in various environments (including indooroutdoor scenes)different types of background scenes. the experimental results prove the feasibility of the proposed method. experiments on real scenes show that the algorithm is effective for object detectiontracking.