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Abstract

Object detection and tracking on Broadcast Sports Video (BSV) plays an important role in content analysis and also it's a challenging task because of playing track, play court, player's size, noises, disturbances and occlusion in a playing court which fails the results of detection. In addition, occlusion of multiple players in matches also causes a failure of tracking. In this paper, an comprehensive study of a robust technique for object detection and player tracking using a Kalman filter(KF) has elaborated. The parameters of the KF are dynamically changed based on the results of player detection or line detection in the video frames. The algorithm is tried on respective case study for the better result.

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