Surf-Badge-Based Target Tracking

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Abstract

Abstract—With the great demand for constructing a safe and security environments, video surveillance becomes more and more important. In order to detect each individual target under serious occlusions, we propose a SURF-badge-based target tracking method to overcome the occlusion problem. First, the blob-based object detection and verification is used to initialize the object tracking scheme. Second, the moving object region is segmented into three portions for locating the SURF feature points as the badge of moving object. Finally, the dynamic updating of the SURF feature points is applied for the purpose of robust target tracking. The experimental results show that the accuracy of individual tracking under serious occlusions can be higher than 90% and the efficiency can approach 10-12 fps.

Keyword：video surveillance, occlusion, blob-based-detection, target tracking, SURF