Exploiting Superpixel and Hybrid Hash for Kernel-Based Visual Tracking

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PII: S0031-3203(17)30115-2
DOI: 10.1016/j.patcog.2017.03.015
Reference: PR 6088

To appear in: *Pattern Recognition*

Received date: 13 June 2016
Revised date: 9 February 2017
Accepted date: 8 March 2017

Please cite this article as: Guile Wu , Wenxiong Kang , Exploiting Superpixel and Hybrid Hash for Kernel-Based Visual Tracking, *Pattern Recognition* (2017), doi: 10.1016/j.patcog.2017.03.015

Highlights

- Superpixel analysis approach is employed to reconstruct target appearance in visual tracking.
- Representative superpixel blocks combined with kernel-based filter are exploited for roughly target location.
- Superpixel block modification method based on hybrid hash is proposed to accurately locate target.
- Conventional kernel-based filter is improved with peak-response scale estimation and color features.
- Comprehensive experiments on publicly available datasets demonstrate our tracker superior to state-of-the-art trackers.