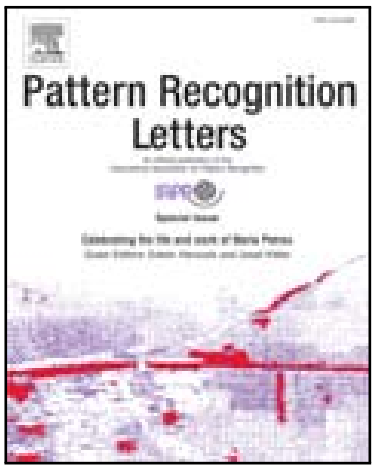

Spatio-temporal feature using optical flow based distribution for violence detection

Amira Ben Mabrouk, Ezzeddine Zagrouba

PII: S0167-8655(17)30134-4
DOI: 10.1016/j.patrec.2017.04.015
Reference: PATREC 6799

To appear in: *Pattern Recognition Letters*

Received date: 19 November 2016
Revised date: 11 March 2017
Accepted date: 23 April 2017

Please cite this article as: Amira Ben Mabrouk, Ezzeddine Zagrouba, Spatio-temporal feature using optical flow based distribution for violence detection, *Pattern Recognition Letters* (2017), doi: 10.1016/j.patrec.2017.04.015

Highlights

- Spatio-temporal feature named DiMOLIF for violence detection.
- Bivariate distribution estimation of the magnitude and the orientation of the optical flow vector around STIP points.
- Ability of the proposed feature DiMOLIF to detect violence in both crowded and uncrowded scenes.
- Obtained results show that DiMOLIF outperforms ViF and OViF descriptors.