Abstract

In this paper we present a method for objects tracking in images sequence. This approach is achieved into two main steps. In the first one, we constructed the Local Binary Pattern (LBP) histogram pattern of each image in the sequence and the reference pattern. In the second one, we perform the algorithm by the pattern selected based on a distance measures to find similarity between two histograms. The maximum LBP histogram distance gives best results than the chi-square one. The proposed approach has been tested on synthetic and real sequence images and the results are satisfactory.

References

- Timo Ahonen and al, 2009. Rotation invariant image description with local binary pattern histogram
- Jo Chang-yeon, &quot;Face Detection using LBP features,&quot; Final Project Report, December 2008.
- Olivier STRAUSS Laboratoire d&apos;Informatique, de Robotique et de Micro-électronique de Montpellier
- Département Robotique LIRMM 161, Rue ADA 34392 Montpellier CEDEX 5 France
- Rubner, Y. , Tomasi, C. , Guibas, L. J. : The earth mover&amp;apos;s distance as a metric for image retrieval. IJCV (2000)
- Cula, O. , Dana, K. : 3D texture recognition using bidirectional feature histograms. IJCV
Xu, D., Cham, T., Yan, S., Duan, L., Chang, S.: Near Duplicate Identification with Spatially Aligned Pyramid Matching. CSVT (accepted) 3

Index Terms

Computer Science
Pattern Recognition

Keywords
Sequence image  Computer vision  Tracking  LBP histogram  chi-square distance