Abstract

SIFT (scale invariant feature transform) being a feature extraction algorithm was initially used for object recognition, pattern recognition. But from past few years this algorithm is frequently being used for human face recognition based on feature extraction and matching. The twist here is that between feature extraction and its recognition I have used fuzzy clustering to create clusters so that we can localize the areas for feature point detection. As this recognition is based on a GUI system whose recognition rate is almost 99% – 100% for face recognition and feature detection.

References

- David G. Lowe, &quot;Distinctive image features from scale-invariant keypoints,&quot; in international journal of computer vision, January 5, 2004.
- Wenyu Chen, Yanli Zhao, Wenzhi Xie and Nan Sang, &quot;An Improved SIFT Algorithm for Image Feature-Matching,&quot;.
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Human Face Recognition


Index Terms

Computer Science  Image Processing

Keywords

SIFT  Fuzzy clustering  Image recognition  feature extraction.