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

- Wenyu Chen, Yanli Zhao , Wenzhi Xie and Nan Sang, "An Improved SIFT Algorithm for Image Feature-Matching,"
- Han Yanbin, Yin Jianqin and Li Jiming, "Human Face Feature Extraction and Recognition Base on SIFT," in 2008 International symposium on computer science and computational technology, IEEE.

**Index Terms**

Computer Science  
Image Processing

**Keywords**

SIFT  
Fuzzy clustering  
Image recognition  
Feature extraction.