Abstract

This paper presents an improvised Moving kernel based fuzzy C-means (MKFCM) for land-cover mapping of trees, shade, building and road. It starts with the single step preprocessing procedure in which first the input image is passed through a median filter to reduce the noise and get a better image fit for segmentation. The pre-processed image is segmented using the Moving KFCM algorithm and classified using Bayesian classifier with kernel Distribution type. KFCM with moving property is used to improve the object segmentation in satellite images. Simulation result show that classification accuracy for different regions using Moving KFCM is better than k-means and KFCM using Naive Bayes classifier with four different kernels.
An Approach for the Segmentation of Satellite Images using K-means, KFCM, Moving KFCM and Naive Bayes Classifier


An Approach for the Segmentation of Satellite Images using K-means, KFCM, Moving KFCM and Naive Bayes Classifier


**Index Terms**

- Computer Science
- Artificial Intelligence

**Keywords**

- Segmentation
- Classification
- Feature extraction
- Naive Bayes classifier
- Moving KFCM