Abstract

Remote sensing plays a vital role in overseeing the transformations on the earth surface. Unsupervised clustering has an indispensable role in an immense range of applications like remote sensing, motion detection, environmental monitoring, medical diagnosis, damage assessment, agricultural surveys, surveillance etc. In this paper, a novel method for unsupervised classification in multitemporal optical image based on DWT Feature Extraction and K-means clustering is proposed. After preprocessing the optical image is feature extracted using the discrete wavelet transform. On the feature extracted image feature reduction is performed using energy based selection. Finally, different K-means clustering is performed and analyzed using Matlab and ground truth data for improving classification accuracy.
References


Index Terms

Computer Science

Image Processing

Keywords

K-Means multitemporal clusters centroids city block squared Euclidean