Abstract

This paper presents a framework of incorporating kernel methods with fuzzy based image classifiers. The goal of image classification is to separate images according to their visual content into two or more disjoint classes. The work demonstrates how non linearity among the different classes of remote sensing data with uncertainty are handled with Noise classifier without entropy (fuzzy classifier) using kernel approach for land use/land cover maps generation. It also show case the comparative study between performance of Noise Classifier with Euclidean Distance and Noise Classifier with Kernel functions. The introduction to Kernel function in fuzzy based classification techniques provides the basis for the development of more robust approaches to the classification problem.

References


Index Terms

Computer Science

Image Processing
Keywords

Image Classification, Fuzzy Classifier, Kernel functions.