Abstract

Hyperspectral image classification plays a major role in remote image analysis. Hyperspectral images provide both spatial details of airborne imagery and spectral resolution for spectroscopic analysis and narrow band analysis techniques. Available satellite sensors like Hyperion, Hy-Map and AVIRIS are good sources of hyperspectral data. Applications of hyperspectral images are remote sensing, seed viability study, biotechnology, environmental monitoring, medical diagnose, food, pharmaceuticals and so on. Traditional techniques are difficult to deal with hyperspectral images directly, because hyperspectral images have continuous narrow spectral bands. To overcome this, hyperspectral image classification can be done using different softcomputing techniques. Softcomputing is an emerging field consisting of Fuzzy Logic, Neural Network and Genetic Algorithms. This paper reviews how hyperspectral image classification can be done using different softcomputing techniques.
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Index Terms

Computer Science                              Image Processing

Keywords

Hyperspectral Image classification, Fuzzy Logic, Artificial Neural Networks, Genetic Algorithm