Abstract

The issue of SVMs parameter optimization with particle swarm optimization (pso) provide the optimum solution. This new classification approach may be an efficient alternative, in existing paradigms. PSO technique work with high dimensional datasets and mixed attribute data. The structure of the image is recognized through PSO technique which provide optimized parameter for SVM. This approach determines the performance of image classification after structural recognition based on content of image and comparing the obtained results with those reported for various other classification approaches. PSO-SVM technique can be applied mixed-attribute, hyperspectral data, hyperdimension spaces & problem description spaces and it can also be a competitive alternative to well established classification techniques. The optimized process of data reduces the unclassified region of support vector machine and improves the performance of image classification. The feature of region of image is classified by PSO-SVM technique in inside the image. Classified features are increase recognition ratio because the feature of image is optimized.


- Yu ZENG a, Jixian ZHANG a, J. L. van GENDEREN b, Guangliang WANG a, "SVM-based Multi-textural Image Classification and Its Uncertainty Analysis." Chinese Academy of Surveying and Mapping, Beijing 100830, P. R. China; b University of Twente, 2012 International Conference on Industrial Control and Electronics Engineering.


**Index Terms**

Computer Science

Image Processing
Keywords
Structural recognition  PSO technique  SVM classifier  image classification.