Abstract

In this paper, an efficient automated mass classification system for breast cancer in digitized mammograms using NonSubsampled Contourlet Transform (NSCT) and Support Vector
Machine (SVM) is presented. The classification of masses is achieved by extracting the mass features from the contourlet coefficients of the image and the outcomes are used as an input to the SVM classifier for classification. The system classifies the mammogram images as normal or abnormal, and the abnormal severity as benign or malignant. The evaluation of the system is carried on using mammography image analysis society (MIAS) database. The experimental result shows that the proposed method provides improved classification rate.

Reference


Index Terms

Computer Science
Signal Processing
Key words

Mammogram  Mass classification  Benign
Malignant
NSCT
SVM