Abstract

Content Based Image Retrieval systems are helpful to the radiologists in diagnosis of breast cancer. This paper presents a method for retrieving breast tissue as normal, benign or malignant in mammograms by using FuzzyTextons. In feature extraction first fuzzy texton images of mammograms are calculated. During the detection of fuzzy texton, fuzzy based quantization is performed to get more accurate textons. Then feature vectors are extracted for fuzzy textons and for efficient classification and retrieval Support Vector Machine is used. The proposed method was tested for a mammogram set from MIAS database.

References


W.T. Wong, S.H. Hsu, Application of SVM and ANN for image retrieval, European Journal
Classification of Normal, Benign and Malignant Tissues using Fuzzy Texton and Support Vector Machine in Mammographic Images


Index Terms

Computer Science
Applied Sciences

Keywords
Breast cancer, FuzzyTextons, Mammogram, SVM