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 Fuzzy Textons. 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

Classification of Normal, Benign and Malignant Tissues using Fuzzy Texton and Support Vector Machine in Mammographic Images

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Index Terms

Computer Science

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Keywords

Breast cancer, Fuzzy Textons, Mammogram, SVM