

Using Priority Order of Basic Features for Circumscribed Masses Detection in Mammograms

Authors : Minh Dong Le, Viet Dung Nguyen, Do Huu Viet, Nguyen Huu Tu

Abstract : In this paper, we present a new method for circumscribed masses detection in mammograms. Our method is evaluated on 23 mammographic images of circumscribed masses and 20 normal mammograms from public Mini-MIAS database. The method is quite sanguine with sensitivity (SE) of 95% with only about 1 false positive per image (FPpI). To achieve above results we carry out a progression following: Firstly, the input images are preprocessed with the aim to enhance key information of circumscribed masses; Next, we calculate and evaluate statistically basic features of abnormal regions on training database; Then, mammograms on testing database are divided into equal blocks which calculated corresponding features. Finally, using priority order of basic features to classify blocks as an abnormal or normal regions.

Keywords : mammograms, circumscribed masses, evaluated statistically, priority order of basic features

Conference Title : ICMBE 2016 : International Conference on Medical and Biomedical Engineering

Conference Location : Paris, France

Conference Dates : April 25-26, 2016