

Machine Learning-based Lung Cancer Image Classification using GLCM and LBP Features

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Abstract – Most of the models for lung cancer classification based on lung cancer image are various types of the classification model with binarization image pre-processing. This research work proposes a method based on Random forest classifier for lung cancer image classification from the given database images. Feature extraction of the image is accomplished using LBP (Local Binary Pattern) and GLCM (Grey Level Co-occurrence Matrix). Then the extracted features are classified by the Random forest classifier. This work provide the confusion matrix with sensitivity, specificity and accuracy for LBP, GLCM and Hybrid (LBP+GLCM) based approaches.

Keywords – GLCM, LBP, Lung Cancer, SCLC, NSCLC.