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LUNG NODULES IDENTIFICATION RULES EXTRACTION WITH NEURAL FUZZY NETWORK

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Abstract: Image processing technique is used in medical areas which help in image improvement in the treatment and detection of diseases at their early stages mainly in several tumors and cancers like lung cancer, breast cancer, etc. Sometimes, image segmentation provides the wrong results which lead to the false detection of the cancerous sections from their background images. Lung cancer is widespread and severe cancer in the world. Hence, the early detection and treatment of lung cancer are crucial to avoid further stages of cancer and death. This research focused on lung nodules identification rules extraction with the fuzzy neural network. This research presented the techniques and methods for the image segmentation for various types of images. It also described the various concepts related to image processing and its techniques. Image segmentation is a method which is used to segment the image to determine the patterns from the images. The results indicated that the direct segmentation does not work properly using the background images in order to identify the cancerous section. So, it is essential to propose a new segmentation technique to segment the cancerous area accurately. This research showed overall accuracy of 92.30%.

Keywrods - Image processing, Neural Network, Image segmentation, Image Enhancement, Fuzzy neural network.

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