

Morphological features of lung white spots based on the Otsu and Phansalkar thresholding method

Title	Morphological features of lung white spots based on the Otsu and Phansalkar thresholding method
Author Order	1 of 6
Accreditation	
Abstract	<p>COVID-19 is a disease that causes respiratory system disorders, so various tests are needed. One of them uses a chest X-ray or thorax. A chest X-ray will depict the lungs as a whole so that patches like white shadows will be visible. In this study, the number of lung areas and white spots can be observed and detected using segmentation techniques in image processing. But before entering the segmentation stage, the image will go through the preprocessing stage using the tri-threshold fuzzy intensification operators (fuzzy IO) method. It then segmented the lungs using the Otsu method by changing the digital image from grey to black and white based on comparing the threshold value with the pixel colour value of the digital image. Then, further segmentation was carried out using the Phansalkar method to detect and simultaneously count the number of white spots. Referring to the experiments we have carried out, Otsu Phansalkar's segmentation performance promises to be developed further.</p>
Publisher Name	Institute of Advanced Engineering and Science
Publish Date	2024-01-01
Publish Year	2024
Doi	DOI: 10.11591/ijeecs.v33.i1.pp530-539
Citation	
Source	Indonesian Journal of Electrical Engineering and Computer Science
Source Issue	Vol 33, No 1: January 2024
Source Page	530-539
Url	https://ijeecs.iaescore.com/index.php/IJEECS/article/view/35292/17891
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