

UNIVERSITY OF CALIFORNIA

Department of Radiology

Change in Radiological Features For Determining Nodule Malignancy in Lung CT

Scoring in Lung Images

by

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For his M.S. degree in the Department of Engineering & Engineering

are routinely diagnosed from CT images. The presence of a nodule in the lung is a common finding on CT scans. The diagnosis of a nodule as benign or malignant is often difficult. Machine learning may also provide prognostic information. In this study, we combined feature information from radiologists and machine learning to improve the diagnosis of lung nodules. The accuracy of the combined model was 83.71% on a test set, which is higher than the accuracy of manual feature extraction. The highest accuracy of the model with manual feature extraction was 81.00% on a test set. This study shows that the combination of manual and machine learning features can improve the diagnosis of lung nodules.

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THE FACULTY IS INVITED

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