

Early Detection of Lung Cancer Using CNN: Enhancing Diagnostic Accuracy and Reducing False Positives

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Abstract: *This work aims to develop a deep learning application that can accurately perform early lung cancer diagnosis using Convolutional Neural Networks (CNN's). Using an image of the lungs that are scanned at high resolution helps improve accuracy of the diagnoses and aids in eliminating false behaviour that is common with traditional methods of diagnosis [2]. The main focus is to ensure that the necessary actions are taken as quickly as possible so as to increase the chances of survival. The proposed CNN-based system was fed with a set of 50 lung scans with high resolution and it achieved greater accuracy in identifying cancerous lesions than existing techniques with precise and recall metrics excelling [3]. In this way, this research seeks to assist radiologists by minimizing their diagnosis of patients while increasing the accuracy.*

Keywords: Convolutional Neural Networks

