LUNG NODULE DETECTION

ABSTRACT

Lung nodules, small, rounded or oval growths within the lungs, are typically discernible through chest X-rays or CT scans. They can arise from various causes, encompassing both benign and malignant origins. Benign nodules may be attributed to infections, inflammation, or lung tissue scarring, while malignant ones could signal the presence of lung cancer. Our project's primary objective is the development of a machine learning model tailored to automate the identification and categorization of lung nodules within medical images. This initiative seeks to enhance early lung cancer detection and alleviate the workload of radiologists. The comprehensive project workflow encompasses data collection, model development, and rigorous training. The model's efficacy is subsequently evaluated utilizing pertinent metrics, with the results presented alongside insightful observations and potential implications for advancements in healthcare and medical research within the domain. This endeavor represents a significant stride toward bolstering diagnostic capabilities in the medical field.

Team Members

G. Ravi Sri Chandana - 20WH1A1215

V. Jaswitha - 20WH1A1224

P. Sai Varshitha- 21WH5A1204

Internal Guide

Dr. P. Kayal

Associate Professor