

LUNG CANCER DETECTION AND CLASSIFICATION FROM CHEST CT SCAN USING MACHINE LEARNING

ABSTRACT

The goal of the project is to create a machine learning model that can identify and categorize lung cancer from CT scans of the chest. Through the use of deep learning algorithms and sophisticated image processing techniques, the system will evaluate radiological features to accurately identify spots that may be malignant. The identified abnormalities will be categorized by the model into pertinent classes, yielding useful information like tumor type and stage. This application is very promising for lung cancer, one of the world's top causes of cancer-related death, as it can help with early diagnosis, prompt intervention, and better patient outcomes. This project is to classify and predict the lung cancer using chest CT scan and preprocess the data and split the data and apply deep learning for the feature extraction and then apply the machine learning for the classification and finally calculate the performance metrics.

