Predicting Lung Cancer Survivability using SVM and Logistic Regression Algorithms

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Authors:
Animesh Hazra, Nanigopal Bera, Avijit Mandal

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Abstract

One of the most common and leading cause of cancer death in human beings is lung cancer. The advanced observation of cancer takes the main role to inflate a patient’s probability for survival of the disease. This paper inspects the accomplishment of support vector machine (SVM) and logistic regression (LR) algorithms in predicting the survival rate of lung cancer patients and compares the effectiveness of these two algorithms through accuracy, precision, recall, F1 score and confusion matrix. These techniques have been applied to detect the survival possibilities of lung cancer victims and help the physicians to take decisions on the forecast of the disease.

References


11. NSCLC - Radiomics [online] https://wiki.cancerimagingarchive.net/display/Public/NSCLC-Radiomics; jsessionid=84D480480E80C9EC1950 26 ED04D95433 [Dataset].


Index Terms

Computer Science   Artificial Intelligence

Keywords

Lung Cancer, Logistic Regression, SVM, Confusion Matrix.