Submission Summary

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Paper Title
Review of Lungs Cancer Prediction Using Machine Learning

Abstract
To improve patient outcomes, lung cancer, a major cause of cancer-related death globally, requires precise diagnostic and prognostic technologies. Using its capacity to evaluate genetic, and imaging data, machine learning has become a key method for predicting lung cancer. Support Vector Machines (SVM), Random Forest (RF), k-nearest neighbors (KNN), Logistic Regression (LR), Decision Trees (DT) are just a few of the machine learning algorithms that are used in this article along with their efficacy and applications. Both Decision Trees and Random Forest have work best for their interpretability and capacity to handle missing data, DT's hierarchical decision-making mechanism allows it to demonstrate great prediction accuracy. Using instance-based learning, KNN works well for smaller datasets, but its performance decreases when dealing with noisy data. Logistic Regression is still used as a standard by which to compare, especially when it comes to binary classification jobs.

Keywords- Lung cancer, cancer-related death, machine learning, genetic data, predicting lung cancer, Support Vector Machines (SVM), Random Forest (RF), k-nearest neighbors (KNN), Logistic Regression (LR), Decision Trees (DT), prediction accuracy, instance-based learning, noisy data, binary classification.

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