Abstract

Lung cancer is one of the most common malignant neoplasms all over the world. It accounts for more cancer deaths than any other cancer. It is increasingly being recognized in hospitals all across the globe. With the increasing prevalence of smoking, Lung cancer has reached epidemic proportions. Thus, we propose a 3D-CNN-based model [6] that uses a patient’s Computed Tomography scans to detect nodules and check for malignancy. We intend to add an explainable aspect to the result since the central problem of such models is that they are regarded as black-box models, and they lack an explicit declarative knowledge representation [9]. This calls for systems enabling to make decisions transparent, understandable and explainable.

References

1. D. R. Aberle et al. Reduced lung-cancer mortality with lowdose computed tomographic


11. The DICOM Standard.

**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Supervised Learning, Convolutional Neural Networks