An Implementation of Deep Neural Network for Lung Cancer Detection

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Abstract: *Lung cancer varies from region to region due to a variety of medical factors. Early detection of lung cancer is paramount to reducing high mortality. The global lung screening program focuses on performing PET / CT scans in the most vulnerable groups to increase early detection rates. Despite the use of cumbersome procedures, side effects rarely occur until the infection progresses, making it difficult for a radiologist to detect the wound. Each year, the American Cancer Society estimates the number of new growth cases and deaths worldwide this year and collects the latest information on tumor incidence, mortality, and survival. Realistic and accurate information is the basis of the disease management initiative. Over 3/4 of illnesses have been confirmed with tobacco use. In addition, hereditary components, exposure to environmental toxins, and second-hand smoke can rapidly amplify the disease. Cycles such as chemotherapy, radiation therapy, surgery, and skin-opening drugs increase survival and personal wellbeing. This strategy concerns the basic idea of digital image processing, the early and critical stages of diagnosis with a segmentation strategy and a sharp computational method with various computational noise reductions. Use MATLAB to examine the location of CT images obtained from cancer research institutes.*

Keywords: CT, PET, MATLAB, Lung Cancer Detection CNN (Convolutional Neural Network)..

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