

A CNN Model for Detection of Covid 19 Disease Using Lungs CT - Scan

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Abstract: *The Corona Virus Disease popularized as COVID-19 is a highly transmissible viral infection and has severe impact on global health. It impacted the global economy also very badly. Corona virus is a rapidly spreading viral infection that has become a pandemic posing severe threats around the world. It is necessary to identify the cases priory so that we can prevent the spread of this epidemic. If positive cases can be detected early, this pandemic disease spread can be curtailed. Prediction of COVID19 disease is advantageous to identify patients at a risk of health conditions. A model for COVID prediction from Lungs CT-SCAN is presented in this project. One of the possible ways of determining the patient infection to COVID- 19 is through analysing the chest CT-SCAN images. This Application for COVID detection from CT scan can be very useful, and can help to overcome the shortage of availability of doctors and physicians in remote places. In this paper, we have trained several deep convolution networks with the introduced training techniques for classifying CT-SCAN images into two classes: COVID-19 and NONCOVID-19, based on two open-source datasets. The results obtained in COVID detection using VGG-16(Visual Geometry Group), ResNet50 (Residual Networks), Xception with a Good training and testing accuracy.*

Keywords: CT-SCAN, COVID19, NON_COVID19, VGG-16, ResNet50, Xception

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