

In the global health disaster of the Coronavirus infection-2019 (Covid-19) pandemic, the health sector is avidly seeking new technologies and strategies to detect and manage the spread of the Coronavirus outbreak. Artificial Intelligence (AI) is currently one of the most essential aspects of global technology since it can track and monitor the rate at which the Coronavirus develops as well as determines the danger and severity of Coronavirus patients. In this paper, we have proposed a two-stage end-to-end Deep Learning (DL) model which can be used to predict the presence and severity of Covid-19 infection in a patient as early and accurately as possible so that the spread of this viral infection can be slowed down. Hence, based on the Computed Tomography (CT) scans or chest X-rays provided by the user as an input, the DL models are built that can forecast the presence of Covid-19 in that respective patient accurately and efficiently. In this paper, 5 DL models i.e., VGG16, InceptionV3, Xception, ResNet50, and Convolution Neural Networks (CNN) are built and their comparative analysis is carried out for the diagnosis of Covid-19. On the Google Colab GPU, the models are trained for 100 epochs on a total of 1686 images of chest X-rays and CT scans. The experimental results show that out of all these models, the model based on the Xception algorithm is the most accurate one in determining the presence of the disease and provides an accuracy of 81% and 89% on CT scans and Chest x-rays respectively.