Face Mask Detection Using Deep Neural Networking

Abstract -

In the years between 2020 and 2023, the world is affected by covid-19. It spreads from human to human by breathing, when the affected person leaves droplets on the surface by contacting such a contaminated surface another will also get affected. So, to prevent the spread of covid WHO released some precautions. one among them is wearing a mask in public places. Initially, everyone used to follow the rule for the time being people violated the rule. This application help's in detecting the person who was not wearing the mask.

Introduction -

The application is used to detect whether the person wearing the mask is not. We have used Deep neural networking technology for detecting the same. The model is trained with data that was created by me with good accuracy.

The dataset contains 488 number files and 245 class pictures with masks and without masks. 243 pictures for 2 images for testing.

Pre-processing -

The pre-processing is done on the dataset. For the alignment of all pictures in the same size. 256x256 size of each picture.

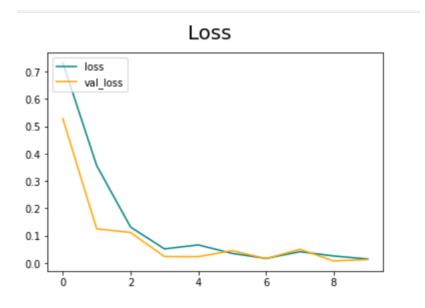
Model -

Sequential model.

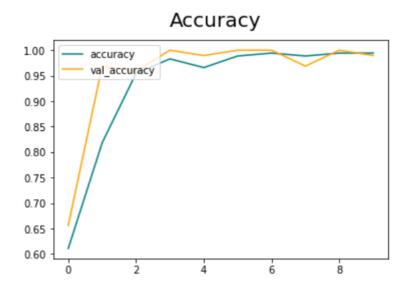
- A simple stack of layers with exactly one input tensor and one output tensor per layer is suitable for a sequential model.

Graphs -

Loss-



Accuracy –



Feature works -

Currently, this application works only on pictures containing a single face. In the future, we can enhance this application. By adding dataset images with images of people wearing masks not covering their noses properly and also to detect the masked face using the Face Net model of Deep Neural Network