

Abstract

The mask detection system is an effort to prevent the spread of COVID-19. In this study, a mask detection system was developed using the Yolo-v2 deep learning model with the help of ResNet-50. ResNet-50 is used as a backbone layer to replace Yolo-v2, while Yolo-v2 is the main component for face mask detection. This study uses the Face Mask Dataset and Medical Mask Dataset in the form of images taken from Kaggle. Testing the configuration parameters during model training is carried out with the hope of increasing the accuracy and performance of the mask detection system. The mask detection system using this method obtained the highest F1-Score of 84%.

Keywords: *mask detection, ResNet-50, Yolo-v2, COVID-19*