## **ABSTRACT**

In 2020, Indonesia has been infected with the Covid 19 virus. The very significant spread of it has forced the government to issue regulations regarding the application of the use of masks to prevent the development of the COVID-19 virus in the community. The problem with the Covid task force officers in monitoring people who wear masks and do not wear masks. By utilizing technological developments in the fields of deep learning and computer vision, this study aims to detect people who wear masks and do not wear masks on their faces. The detection area is around the face. The method used is a convotiunal neural network (CNN). This study compares 3 CNN architecture models, namely MobileNetV2, INCEPTIONV3 and VGG16. The results of the evaluation of the model using the confusion matrix showed the accuracy of INCEPTIONV3 31.65%, MobileV2 33.94%, and VGG16 71.5%. Highest accuracy on VGG16 with batch size 2, epochs 20, validation split 0.2. Suggestions for further research are to add more varied datasets such as images from the left and right sides, images of people wearing masks but blocked by objects and images that lack light.

**Keywords :** covid19, deeplearning, CNN, Open Cv, MobileNetV2, VGG16, Inception V3