**FACEMASK MONITORING SYSTEM**

**ABSTRACT**

The project is about detecting whether a person is wearing a mask or not which is run on the host network using the camera interface using OpenCV python library and for the API purpose we are using Swagger UI. Face Mask Detection system built with OpenCV, Keras/TensorFlow using Computer Vision concepts in order to detect face masks in static images as well as in real-time video streams. The model is accurate, and since we used the MobileNetV2 architecture.

We are using Swagger UI because it allows anyone either their own development team or consumers to visualize and interact with the API’s resources without having any of the implementation logic in place. When this application is run on the host network it automatically captures images every one minute and sends the data in the form of JSON data which interprets how many members are wearing masks or not. We can also send images as an input to this application which sends output as labels with either mask or no mask. It can be run on any device since it’s an API.

In the present scenario due to Covid-19, there are no efficient face mask detection applications which are now in high demand for transportation means, densely populated areas, residential districts, large-scale manufacturers and other enterprises to ensure safety. It is very useful to detect masks on the faces on real time scenarios.

**KEYWORDS**: API, OpenCV, AI, Deep learning, MobileNetV2, COVID-19.