Real Time Face Mask Monitoring And Automated Alert System To Prevent COVID-19 Spread

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Abstract. Millions of people have already died as a result of the covid-19 pandemic, which has become a major problem not only in Sri Lanka but also around the world. According to the World Health Organization, wearing protective face masks in accordance with health regulations can help to reduce the disease. The relevant authorities are under a huge strain, and they are working diligently to stop this risk and encourage people to wear proper face masks. The number of deaths is rising day by day, and some countries are being forced to go into lockdown because of the situation, which will have a significant impact on the global economy. Face-covering regulations have been adopted in several countries. It is required to detect and advise those who do not wear face masks in accordance with safety regulations. Whenever one infected person interacts with others without wearing a mask, the infection quickly spreads. However, monitoring and recognizing anyone not wearing a face mask across a large number of groups at the same time becomes a complex, challenging, and time-consuming process. If someone is not wearing a mask or is wearing one without following the health recommendations, this system will detect them and take their photo and will be able to send an alert message with the photo and location to the admin/authorized parties, allowing appropriate parties to act on their behalf. This method will be extremely useful in controlling the covid-19 pandemic for the health sector, security agencies, government, and citizens. Therefore, this real-time face mask monitoring system can be integrated into existing CCTV cameras and used in collaboration with computer vision techniques to monitor people and prevent the present pandemic using image processing and deep learning.

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