

COVID-19 : Face Mask Detection and Temperature Detection

Aniket Handge¹, Yaduraj Patil², Uday Bari³, Roshan Kathale⁴, Rajendra Sable⁵

Students, Department of Computer Engineering^{1,2,3,4}

Professor, Department of Computer Engineering⁵

SVIT College of Engineering, Nashik, Maharashtra, India

Savitribai Phule Pune University, Pune, Maharashtra, India

Abstract: Data from various sources such as the World Health Organization, Wikipedia, the Government Health Ministries, The New York Times, and other sources indicate that COVID-19 has infected more than 127 million people worldwide and killed more than two million people. Two important principles that must be followed in public places to prevent the spread of the virus are to wear a face mask and follow a safe distance from the community. To create a safe, comfortable environment for COVID-19, we propose a flexible Computer Vision program based on a machine that focuses on real-time human face monitoring for both face mask and body temperature in public places using Raspberry Pi 4 Model B to detect violation of face mask protocol with a built-in Pi camera and body temperature monitor with the help of the MLX90614 sensor. A safety system has been installed that will allow the person to enter while wearing a face mask and their body temperature is in accordance with WHO guidelines. Therefore, the aforementioned program will help the community to save time and also help to contaminate the spread of coronavirus. This can be done in public places such as colleges, schools, offices, shopping malls, etc. to test people..

Keywords: Deep Learning, Python, TensorFlow, Raspberry-Pi, OpenCv, Covid-19 etc.

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