

Face Mask and Temperature Detection Using Convolution Neural Network

Vishal Nivangune¹, Digambar Gavhane², Makarand Jadhav³

Student, Department of E&TC, NBN SINHGAD college of Engineering, Pune, India^{1,2}

Associate Professor, Department of E&TC, NBN SINHGAD college of Engineering, Pune, India³

Abstract: COVID 19 pandemic is causing a global health epidemic. The most powerful safety tool is wearing a face mask in public places and everywhere else. The COVID 19 outbreak forced governments around the world to implement lockdowns to deter virus transmission. According to survey reports, wearing a face mask at public places reduces the risk of transmission significantly. In this paper, an IoT-enabled smart door that uses a machine learning model for monitoring body temperature and face mask detection. The proposed model can be used for any shopping mall, hotel, apartment entrance, etc. As an outcome a cost-effective and reliable method of using AI and sensors to build a healthy environment. Evaluation of the proposed framework is done by the Face Mask Detection algorithm using the TensorFlow software library. Besides, the body temperature of the individual is monitored using a non-contact temperature sensor. This proposed system can detect the users from COVID 19 by enabling the Internet of Things (IoT) technology.

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