Real-Time Face Mask Detection System

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ABSTRACT

Due to this ongoing Coronavirus pandemic, millions of people have been infected as well as millions of lives have been lost. Due to this reason, it is vital that we take necessary precautions to not only avoid getting infected, but also to avoid spreading the virus among other people. While there are multiple ways to reduce the probability of getting infected, the most practical solution of them all is to wear a face mask that covers the main entry points for the virus which are the nose and the mouth. Therefore, this project can be helpful to remind people to wear a face mask before entering a building or a public area. By using this system, it eliminates the need to physically have a person standing at the entrance to remind the people that are entering to wear a face mask. With the use of face detection, OpenCV, Tensorflow, Keras libraries and other technologies, this project can help detect if a person is wearing a face mask, not wearing a face mask or even if they are wearing the face mask correctly to cover both their nose and mouth. This automated system can be further developed and used in public transportation systems such as busses, trains and airplanes too.

Keywords: Face detection, Face mask, Real-time, OpenCV, Tensorflow, Keras.