DESIGN AND BUILD FACE DETECTION TOOLS AND MASK

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ABSTRACT

2020 has been a bad year for the world because of the outbreak of the corona virus which has been designated by WHO as a pandemic, therefore, the author took the initiative to create a tool that can help the spread of the virus and face detection and masks are the main topic in this final project, mask detection is very important in the current pandemic conditions, to implement face and mask detection, several supporting components are needed, such as a laptop that functions to create source code or programs from face and mask detection, the camera is the most important component, the camera used is a website camera that is small and has a resolution of 720p, not only laptops and cameras, it also takes an open-cv library and a haarcascade as a container for samples for face, mask, mouth and eye detection, the results of this final project reach a good level of accuracy, the average test reaches 80% to 100%, in the face detection test, the tool successfully detects faces with bro, the accuracy rate is 100% from 35 data, while for mask detection, the accuracy rate can reach 80% from the 15 test data taken.

Keywords: accuracy,detection, haarcascade, Mask, open-cv