

Social Distancing Detection Using OpenCV and Machine Learning

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Abstract: - COVID-19 has terribly affected the world, and it is rapidly spreading every day. Due to this ongoing COVID-19 pandemic, many Governments have implemented various social distancing measures such as travel restrictions, closing public places and warning their citizens to keep a 1-meter distance from each when they have to go outside. The main safety measure suggested by WHO is to maintain Social Distance, to reduce the risk of infection when someone coughs, sneezes or speaks. Therefore, we aim to develop a framework that tracks humans for monitoring the social distancing being practiced. To accomplish this objective of social distance monitoring, an algorithm is developed using object detection methods. Here, a YOLOv3 based object detector is explored to detect human presence. The object detector's output is used for calculating distances between each pair of humans detected. This approach of social distancing algorithm will redly mark the persons who are getting closer than a permissible limit.

Keywords: - Social Distancing, YOLOv3, OpenCV, Object Detection, etc.

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