## INSIDE PEOPLE DETECTION SYSTEM USING DEEP LEARNING METHOD

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## ABSTRACT

Violation of health protocols has led to an increase in Covid-19 cases. Crowding in one place makes the spread of this disease faster. Many people still do not comply with the established health protocols. The purpose of this study is to detect the density of people in the room. The data used is obtained in the form of video or images from the camera. One of the methods used to create object detection is You Only Look Once (YOLO). The working principle of YOLO is to look at the entire image once, then pass through the neural network once and immediately detect the existing object. That's why it's called You Only Look Once (YOLO). The YOLOv3 method is used for object detection, with fast and accurate detection capabilities up to twice that of some other methods. In this study, designing a real-time detection application using the YOLOv3 method.

Keywords: object detection, people density, YOLOv3, indoors