



PROJECT REPORT
COMPARISON OF SOME COMPUTER VISION
ARCHITECTURE PERFORMANCE TO IMPROVE THE
HEALTH VIOLATIONS DETECTION

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2022

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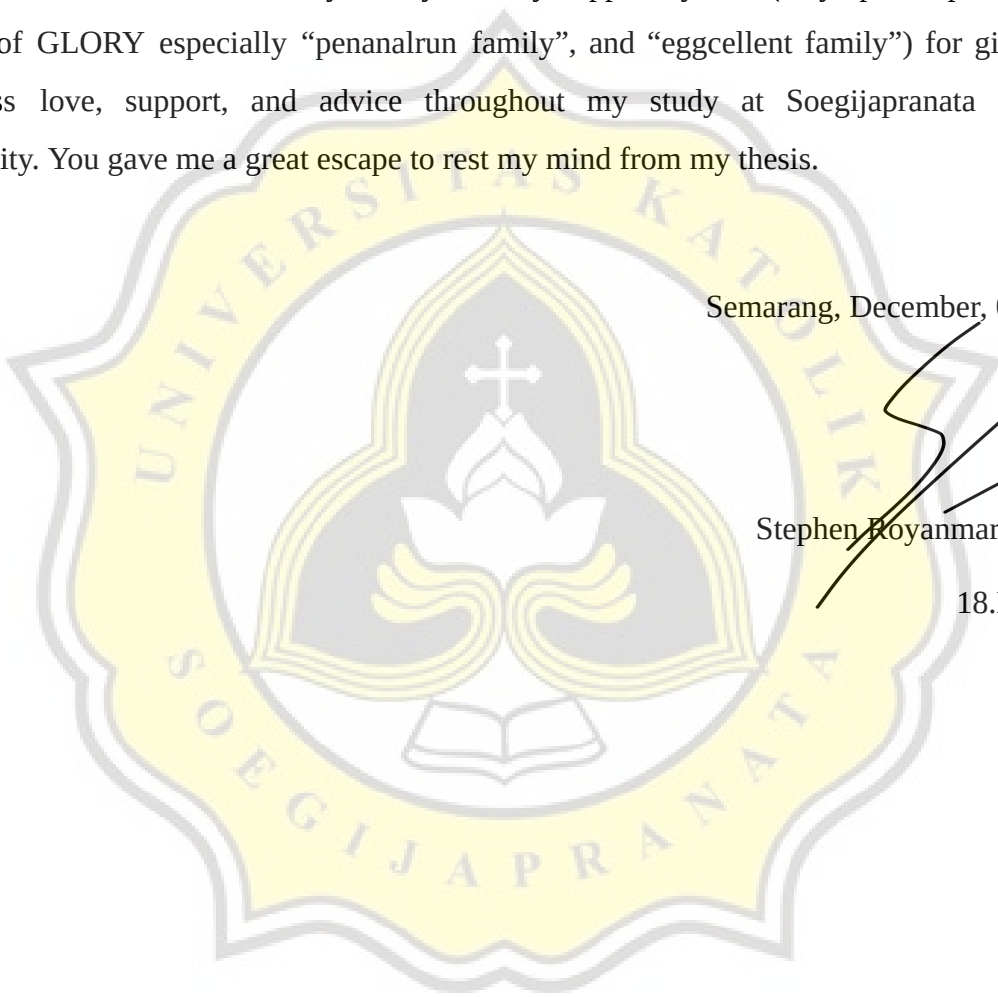
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ABSTRACT

The COVID-19 pandemic is a big problem for the world. Many things have been done to solve the problem of Covid-19, one of which is the prevention of transmission. Prevention of the transmission of COVID-19 has been carried out by many methods, one of which is the creation of a detection system based on computer vision technology.

To improve the performance of the system, researchers conducted special research that compared the performance between 3 architectures, Faster-RNN ResNet50 V1, SSD ResNet50 V1 FPN & SSD MobileNet V2 architectures. SSD ResNet50 V1 FPN was found as the best model in this test. That is because in two experiments the researcher got that model has consistency in performance. In the first experiment, mean average precision, mean average precision of medium images, mean average precision of small images, average recall, average recall for large images, average recall of medium images, and an average recall of small images SSD ResNet50 V1 FPN has the better results than others. In the second experiment, mean average precision, mean average precision of large images, mean average precision of medium images, mean average precision of small images, average recall, average recall of medium images, and an average recall of small images.

Keywords: Computer Vision, Health Violations Detection, Pandemic, Artificial Intelligence

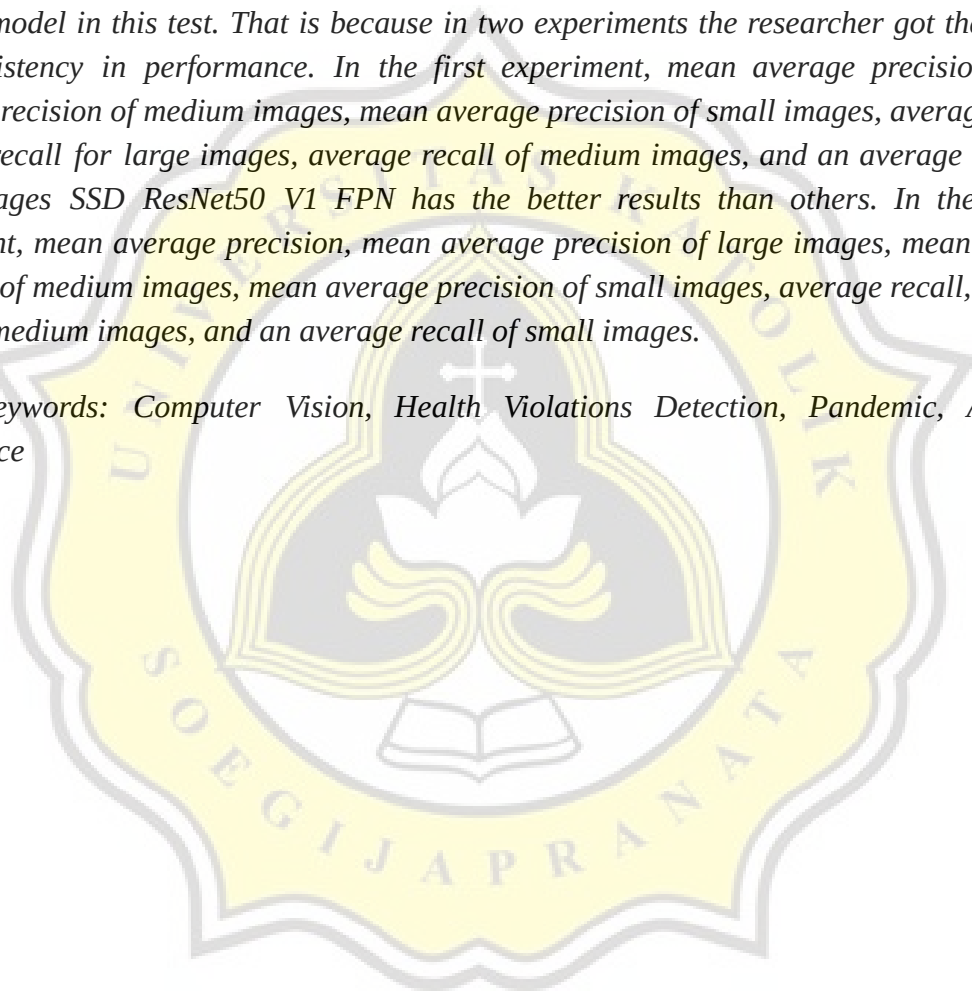


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