ABSTRACT

Early 2020, the world was shocked by COVID-19 pandemic. This pandemic has infected almost the whole world.

One of the common symptoms of COVID-19 is fever. Fever is a condition indicated by body temperature above normal (37,5 ° C).

One of the ways to prevent COVID-19 is to wear mask. Mask usage can prevent COVID-19 transmission so that COVID-19 spread chain can be broken off.

New normal in Indonesia has a potential to make the COVID-19 case rise. Especially in public places. This is because there are still a lot of people that don't obey health safety protocol such as wearing mask and not staying at home when not feeling well. This can be fixed by doing mask usage examination and body temperature examination at every public place entrances.

One of the technological implementation in this case is deep learning and infrared thermometer. Deep learning algorithm can be used to detect mask through camera. Meanwhile, infrared thermometer can be used to measure body temperature to make sure sick people don't wander around in public places. This research aimed to implement convolutional neural network deep learning algorithm for mask detection integrated with infrared thermometer. Hopefully, this device will be used in public places as COVID-19 transmission prevention system.

KEYWORDS: *mask detection, deep learning, convolutional neural network.*