

## **ABSTRACT**

*Three symptoms of the human-infected coronavirus are fever, cough, and breathing difficulty. Among three, fever is the easiest symptom to be detected. Fever is a condition where the body temperature rises above the normal body temperature ( $\geq 37^{\circ}\text{C}$ ). So during this pandemic, one of the health protocols is to check body temperature. The current health protocol system is still considered ineffective because there is still a lot of people that use manual tools which make the body temperature checker exhausted and there is a buildup of queues for people to be examined. Therefore, this study will discuss a non-physical contact temperature measurement tool for the human to detect many objects at once using a thermal camera and Raspberry Pi 4. The researcher carried out three kinds of tests i.e. accuracy test, object distance test, and open spaces resistance test. The accuracy test of the sensor obtained an error of 4.94% to 6.31%. The result was then optimized by linear regression and got good results with an error of 0.48% to 0.91%. The reduction of the error score shows that the temperature measurement with the designed tools and systems run accurately according to the concept. However, the results of distance and durability tests show that the designed tools and systems require further modification.*

*Keywords : Covid-19, Linier Regression, New Normal, Thermal Camera, Raspberry Pi.*