

ABSTRACT

COVID-19 or Coronavirus disease has become a global pandemic and is a major problem that must be controlled immediately. One of the ways that can be done to stop it from spreading is to break the spreading chain of the virus by detecting it and carrying out self-quarantine or isolation. Digital imaging using computed tomography (CT scan) can be used as an alternative in studying COVID-19. Digital imaging with computed tomography (CT scan) is considered to be able to describe the condition of the lungs in patients infected with COVID-19 and can be a clinical diagnostic tool.

In this research, classifying COVID-19 by recognizing images on a computer tomography scan (CT scan) of the lungs using techniques in digital image processing and GLCM feature extraction, followed by making an artificial neural network model so that CT scan images of the lungs can be classified by model. The results in this study obtained the most optimum model for the classification performance of COVID-19 with 93% accuracy, 90% precision, 96% recall and 93% F1-score.

Keywords: *COVID-19, computer tomography scan (CT scan) of the lungs, digital image processing, artificial neural networks.*