Abstract

Till now COVID-19 has affected 196 countries and resulted over 446,946 cases in which 19,811 are deaths, 112,058 got recovered and still many are left to be recovered. This is a viral pneumonia and thus no antiviral drug will work to reduce these cases. During the recovery, only immune system has played a major role. Analyzing and then diagnosing is currently a major challenge. This paper focuses on the classification which can help in analysis of COVID-19 with normal chest X-ray using deep learning technique. An optimal solution has been provided using transfer learning approach keeping in mind the limitation of the dataset. The performance has been determined by train and test loss and accuracy, sensitivity, specificity and p-score. The dataset used for the classification are the x-ray images of the chest as it can help to detect novel coronavirus in patients before RT-PCR lab testing.

References

Optimal Classification of COVID-19: A Transfer Learning Approach

1. Wuhan lab says US media/story-15OJrBp6t9zdY9baRY8P1N.html
2. https://who.int/health-topics/coronavirus#tab=tab_1

Index Terms

Computer Science  Information Sciences

Keywords

COVID-19, deep learning, transfer learning