

## INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

## **COVID-19 Pneumonia Cases Were Detected Automatically Using Deep**

## Learning Model and X-Ray Images

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## Abstract

This (COVID-19) is spreading quickly around the globe. COVID-19 victims have been diagnosed and isolated early, which has helped to slow the virus's spread. Deep learning algorithms are one of the greatest solutions for accurately and quickly recognizing COVID-19. This paper proposes two distinct DL techniques for COVID-19 identification utilizing chest X-ray pictures, both using on a connected CNN model. This preprocessing stage involves augmentation, enhancement, normalization, and resizing CXR images to a defined size. This study presents a deep learning method for identifying CXR pictures based on an assembly of many iterations of a revised.

Keyword: convolutional neural network, Chest X-ray, Computed Tomography Scan, image augmentation

Acronym	Description
CXR	Chest x-ray
IA	Image Augmentation
DL	Deep Learning
GUI	Graphical User Interface
СТ	Computed Tomography Scan
CNN	Convolutional Neural Network
GAN	Generative Adversarial Networks
LR	Literature Review