

Data collection

In our work, we evaluate the proposed model on two CT and CXR datasets, as detailed below:

The first dataset is a CXR dataset called the COVIDx dataset, proposed by Wang et al. This dataset was collected from multiple datasets and amounts to CXR images from 13,870 patients. The images were collected and modified from the following data sources: COVID-19 Image Data Collection COVID-19 Chest X-ray Dataset Initiative ActualMed COVID-19 Chest X-ray Dataset Initiative , RSNA Pneumonia Detection Challenge dataset and COVID-19 radiography database

COVIDx is the largest open access dataset in terms of the number of positive COVID-19 cases. It is composed of images from three classes, i.e., COVID-19, pneumonia, and normal, and contains 358 CXR images from 266 COVID-19 cases, 8066 normal cases (i.e., no pneumonia), and 5538 cases with nonCOVID19 pneumonia. Shows the number of images per class with the split ratio between the training and testing, where the test part of this dataset was composed of 300 images equally divided between the three classes.

The COVID-CT-MD dataset contains volumetric chest CT scans of 169 patients positive for COVID-19 infection, 60 patients with CAP, and 76 normal patients. COVID-19 cases are collected from February 2020 to April 2020, whereas CAP cases and normal cases are collected from April 2018 to December 2019 and January 2019 to May 2020, respectively, in Babak Imaging Center, Tehran, Iran. Three main criteria are considered by three radiologists for classifying the participants, as follows:

You can download the dataset in link given below:

https://drive.google.com/drive/folders/1dRt7RYrLwvNe8v6x_Om4jJDwJgQsXtew?usp=share_link