USER STORY

TITLE:

COVID-19 DETECTION FROM CHEST X-RAY IMAGES USING CONVOLUTION NEURAL NETWORKS.

ABSTRACT:

In this project, our task is to develop an algorithm to classify images of COVID-19 and normal, a deep-learning algorithm based on convolutional neural-network is implemented using python and TensorFlow for image classification. A large number of different images which contains two types of x-rays, namely COVID and normal for classification. A traditional CNN is used because It is shows that the CNN with higher layer performs classification process with much higher accuracy.

BASE PAPER:

COVID-19 detection from chest X-Ray images using Deep Learning and Convolutional Neural Networks

https://www.medrxiv.org/content/10.1101/2020.05.22.20110817v1

MODIFICATION:

In base paper they implemented CNN with various architectures and obtained the highest accuracy of 96.88%, with SoftMax activation function. In our project we used standard convolution neural networks structure with relu activation function with Adam optimizer along with various number of filters for conv layers which results nearly 98% accuracy with less loss.