

PROJECT PROPOSAL

With the issue of Covid-19 being more relevant than ever we can utilize machine learning and artificial intelligence to help the medical community with the identification of specific symptoms associated with this disease. In the most serious cases of Covid-19, the virus invades the lungs. The symptoms are nearly identical to viral pneumonia, novel methods using new data are necessary to successfully identify Covid-19 positive cases.

For this dataset I found on Kaggle, a team of researchers from Qatar University, Doha, Qatar and the University of Dhaka, Bangladesh along with their collaborators from Pakistan and Malaysia in collaboration with medical doctors have created a database of chest X-ray images for COVID-19 positive cases along with Normal and Viral Pneumonia images. In this current release, there are 219 COVID-19 positive images, 1341 normal images and 1345 viral pneumonia images.

I intend to build a multi-class convolutional neural network to correctly identify the Covid-19 positive cases