Abstract:

Topic: Covid-19 Detection from chest X-ray and CT-Scan images

Deep Learning has improved multi-fold in recent years and it has been playing a great role in image classification which also includes medical imaging. CNN has a substantial prospect in detecting COVID-19 patients with medical images like chest X-rays and CTs. Coronavirus or COVID-19 has been declared a global pandemic by the World Health Organization (WHO). Till July 11, 2020, the total COVID-19 confirmed cases are 12.32 M and deaths are 0.556 M worldwide. Detecting Corona positive patients is very important in preventing the spread of this virus. On this conquest, a CNN model is proposed to detect COVID-19 patients from chest X-ray images.

There are Four algorithms:

VGG16, ResNet50, InceptionV3 and Xception were trained separately on Chest X-rays and CT Scans, giving us a total of 8 deep learning models. **80%** of the images were used for **training** the models and the remaining **20%** for **testing** the accuracy of the models.