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Deep Learning for Covid 19 and Pneumonia Detection using Chest X-Ray Images

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Abstract: Animals are also susceptible to Covid-19, a virus that spreads rapidly and infects both humans and animals. This deadly viral disease affects people's daily lives, health and economy of a country. COVID-19 is spreading widely. According to clinical research on people infected with COVID-19, most of these patients develop lung infections due to contact with the disease. A chest CT scan and a chest X-ray (also called a chest radiograph) are two better imaging methods for detecting lung-related problems. However, a chest X-ray is a less expensive procedure than a chest CT scan. The most effective machine learning method is deep learning, which provides insightful analysis of examining large numbers of chest X-ray images that can have a significant impact on Covid-19 screening. Both patients with COVID-19 and healthy individuals received chest X-rays from a PA perspective. We used deep learning- based CNN models and compared their performance after image cleaning and data augmentation.

Keywords: Deep Learning.

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