Deep Features for COVID-19 Screening and Decision-Making

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Abstract. The novel coronavirus (or COVID-19) was identified in December 2019 at the Wuhan province of China. In January 2020, it was declared as a global pandemic by World Health Organization (WHO). Since then, the spread rate of the COVID-19 is high, a number of AI-driven tools have used to help predict, screen, and diagnose COVID-19 positive cases [1]. In such infectious diseases, early detection tools would facilitate largely to mitigate the spread and save lives. In this study, we employ deep learning models, such as DenseNet, ResNet, and VGG to detect COVID-19 positive cases using chest x-ray image dataset of size (publicly available) 3134. Our results (based on deep features) are comparable with state-of-the-art works [2, 3, 4].

References

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