

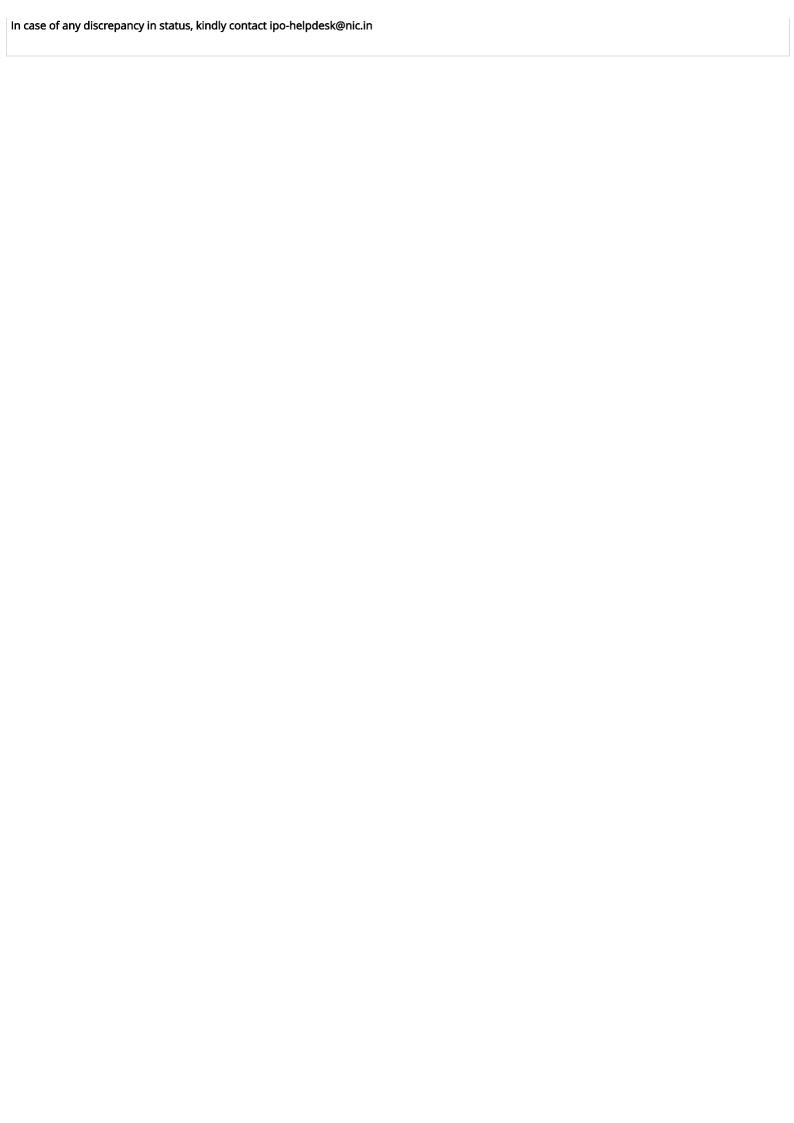
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Millions of people throughout the world have been infected by the coronavirus, which is spreading at an alarming rate and taxing the resources of the healthcare system. For COVID-19 detection, PCR screening is the method of choice. When used on asymptotic patients, CT imaging has proven to be a reliable diagnostic aid for COVID-19. Because of the high prevalence of COVID-19 infections in CT slices, automated infection segmentation techniques can track the progression of sickness. As a result of the high degree of variation in size, shape, contrast, and intensity of the COVID-19 infection region images, the segmentation approach faces significant difficulties. The present invention presents an automated segmentation approach based on deep learning for the detection and delineation of COVID-19 infections in CT scans. Additionally, as compared to existing methodologies, this suggested innovation will require less time and money to identify the infection and annotate the infection areas. This invention will assist physicians in determining the evolution of covid-19 illness, as well as quantifying the disease's load and severity, by segmenting the lung organ from the CT scan as a region of concern and then segmenting the infections contained inside it.

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