

Project Title – A Deep Learning and Lungs X-ray Image based Detection system for COVID-19 Patients at Airports

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Abstract / Description –This project of Mechanical Engg Deptt, MNNIT Allahabad and IIMT Noida aimed at the development of '*A Deep Learning and Lungs X-ray Image based Detection system for COVID-19 Patients at Airports*'.

Currently the global number of confirmed cases of COVID19 stands at an alarming 20+lacs with nearly 10500+ in India. However, due to lack of an inexpensive, precise, fool proof and quick detection method detecting a Covid-19 patient is a daunting challenge. This system is likely to quickly scan the potential Corona virus patients at the airport as soon as the passenger lands from the flight.

The detection system employs the novel concept of deep learning algorithms with lungs X-ray images and is nearly 90-93% precise. The average cost of the hardware and software system presently is Rs. 6 lacs (excluding the xray machine). The target as of now is to possibly file a patent on this idea and seek funding support for implementation on a real time system with a bigger database of xray images.

This prototype recently won the 1st prize (Rs. 50000 /-) in the "Educators and Researchers" category in the 'Fight CORONA Online IDEathon (27-28 March 2020)' recently organized by MHRD Innovation cell & AICTE in partnership with Forge & InnovatioCuris.