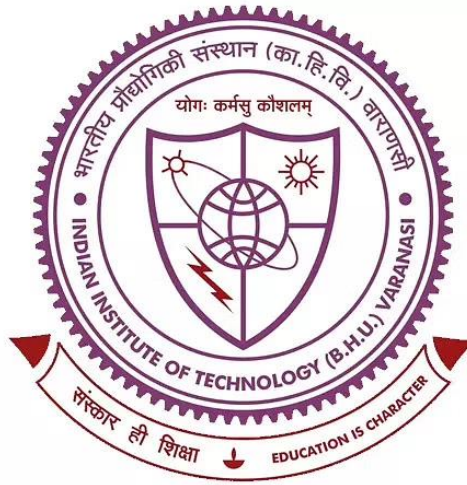


Artificial Intelligence-Driven Deep Learning Models for Automated Detection of Thoracic Diseases in Radiological Images



**Thesis submitted in partial fulfillment for the
Award of Degree**

Doctor of Philosophy

by
Nillmani

**SCHOOL OF BIOMEDICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
(BANARAS HINDU UNIVERSITY)
VARANASI - 221005
INDIA**

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2023

CERTIFICATE

It is certified that the work contained in the thesis titled "**Artificial Intelligence-Driven Deep Learning Models for Automated Detection of Thoracic Diseases in Radiological Images**" by Nillmani has been carried out under my/our supervision and that this work has not been submitted elsewhere for a degree.

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28-4-2023

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SUPERVISOR

DECLARATION BY THE CANDIDATE

I, Nillmani, certify that the work embodied in this thesis is my own bona fide work and carried out by me under the supervision of Prof. Neeraj Sharma from December 2017 to April 2023, at the School of Biomedical engineering, Indian Institute of Technology, Varanasi. The matter embodied in this thesis has not been submitted for the award of any other degree/diploma. I declare that I have faithfully acknowledged and given credits to the research workers wherever their works have been cited in my work in this thesis. I further declare that I have not willfully copied any other's work, paragraphs, text, data, results, etc., reported in journals, books, magazines, reports dissertations, theses, etc., or available at websites and have not included them in this thesis and have not cited as my own work.

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It is certified that the above statement made by the student: Mr. Nillmani is correct to the best of my/our knowledge.

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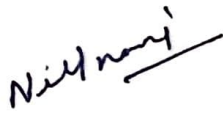
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