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It is certified that the work contained in the thesis titled” **MACHINE LEARNING BASED DATA-DRIVEN METHODS FOR STRUCTURAL HEALTH MONITORING**” by **Sandip Kumar Singh** has been carried out under my supervision and that this work has not been submitted elsewhere for a degree.

It is further certified that the student has fulfilled all the requirements of Comprehensive Examination, Candidacy and SOTA for the award of Ph.D. Degree.

Signature of Supervisor
(Prof Sandeep Kumar)
Department of Mechanical Engineering
Indian Institute of Technology (BHU)
Varanasi

Declaration by the Candidate

I, **Sandip Kumar Singh**, certify that the work embodied in this thesis is my own bonafide work and carried out by me under the supervision of **Prof Sandeep Kumar** from **July 2015** to **July 2019**, at the Department of Mechanical Engineering, **Indian Institute of Technology (BHU), 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 wilfully 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.

Date:

Place: Varanasi

(Sandip Kumar Singh)

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

(Prof Sandeep Kumar)

Department of Mechanical engineering

Supervisor

Signature of Head of Department

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