

**MACHINE LEARNING BASED DATA-DRIVEN  
METHODS FOR STRUCTURAL HEALTH  
MONITORING**



**Thesis submitted in partial**

**fulfilment for the**

**Award of Degree**

***Doctor of Philosophy***

**by**

***Sandip Kumar Singh***

**DEPARTMENT OF MECHANICAL ENGINEERING**

**INDIAN INSTITUTE OF TECHNOLOGY**

**(BANARAS HINDU UNIVERSITY)**

**VARANASI – 221 005**

**INDIA**

**Roll no:15131003**

**2019**