

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511106792 A

(19) INDIA

(22) Date of filing of Application :04/11/2025

(43) Publication Date : 26/12/2025

(54) Title of the invention : A COMPUTER VISION MODEL FOR DETECTING INDUSTRIAL MACHINE ANOMALIES

(51) International classification	:G11B 7/128, H03C 1/50, H03C 3/38, H03C 1/00, H03C 3/00	(71) Name of Applicant : 1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India
(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)RENU DEVI
(33) Name of priority country	:NA	2)SANCHI KAUSHIK
(86) International Application No	:	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention discloses a computer vision model (100) for detecting anomalies in industrial machines. The system comprises a data acquisition module (110), pre-processing module (120), feature extraction module (130), temporal analysis module (135), anomaly detection module (140), alert generation module (150), and feedback learning module (160). By integrating CNNs, RNNs, and hybrid learning approaches, the invention enables real-time, robust, and adaptive detection of abnormal machine behavior, reducing downtime, enhancing safety, and supporting predictive maintenance across diverse industrial environments.

No. of Pages : 15 No. of Claims : 6