

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511106988 A

(19) INDIA

(22) Date of filing of Application :05/11/2025

(43) Publication Date : 26/12/2025

(54) Title of the invention : A SMART SYSTEM FOR AI-BASED ROAD TRAFFIC INCIDENT RESPONSE

(51) International classification	:B60K 28/14, G06F 16/25, H04B 10/588, G05B 19/414, F15B 20/00	(71) <b>Name of Applicant :</b> <b>1)NOIDA INSTITUTE OF ENGINEERING &amp; TECHNOLOGY</b> Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India (72) <b>Name of Inventor :</b> <b>1)AMITA SHUKLA</b> <b>2)RIFA NIZAM KHAN</b>
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(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 present invention discloses a smart system (100) for AI-based road traffic incident response, comprising IoT sensors (101), an AI processing unit (102), a data storage unit (103), a communication module (104), and an emergency response interface (105). The system enables real-time monitoring, detection, classification, and predictive analysis of road traffic incidents. Automated alerts are transmitted to emergency responders and navigation platforms, ensuring quicker dispatch, reduced congestion, and enhanced commuter safety. Experimental validation demonstrates improved detection accuracy, minimized response time, and scalability for integration into modern smart city infrastructures.

No. of Pages : 14 No. of Claims : 6