

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511044075 A

(19) INDIA

(22) Date of filing of Application :07/05/2025

(43) Publication Date : 23/05/2025

(54) Title of the invention : A MULTI-MODAL AI FUSION ENGINE FOR REAL-TIME DISASTER RESPONSE COORDINATION

(51) International classification :G16H0050200000, G06F0003010000, G06Q0050260000, G06F0018250000, B25J0009160000

(86) International Application No :NA  
Filing Date :NA

(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

(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. -----  
**Name of Applicant : NA**  
**Address of Applicant : NA**

(72)Name of Inventor :  
**1)SANCHI KAUSHIK**  
Address of Applicant :Department of Computer Science & Engineering (AIML), Noida Institute of Engineering & Technology, Greater Noida. Greater Noida -----  
-----

(57) Abstract :  
The present invention discloses a Multi-Modal AI Fusion Engine (100) for real-time disaster response coordination. The engine comprises a Data Acquisition Module (102), Multi-Modal Data Preprocessor (104), Feature Extraction Unit (106), Fusion Core Processor (108), Decision Support System (110), and Response Feedback Interface (112) to intelligently fuse visual, sensor, and textual data, delivering dynamic, actionable insights for emergency response optimization.

No. of Pages : 13 No. of Claims : 5