

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511096064 A

(19) INDIA

(22) Date of filing of Application :06/10/2025

(43) Publication Date : 05/12/2025

(54) Title of the invention : AN AUTOMATED DEVICE FOR FACIAL EXPRESSION DETECTION AND EMOTION ANALYSIS

(51) International classification	:G06V0040160000, A61B0005000000, G06F0018243000, G10L0025630000, G06N0003080000	(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)MADHU
(33) Name of priority country	:NA	2)POOJA SHARMA
(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 an automated device (100) for real-time detection of facial expressions and analysis of human emotions. The device comprises an image acquisition unit (101), preprocessing unit (102), feature extraction module (103), emotion classification engine (104), storage unit (105), and communication interface (106). It employs deep learning algorithms to classify emotions across universal categories with high accuracy. The system ensures portability, low power consumption, and robust performance under diverse conditions, making it suitable for healthcare, education, security, and customer experience applications.

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