

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202541098033 A

(19) INDIA

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

(43) Publication Date : 14/11/2025

(54) Title of the invention : HYBRID EMOTION DETECTION IN TEXT USING CONTEXTUAL SENTENCE EMBEDDINGS AND RULE-BASED DISAMBIGUATION

(51) International classification	:G06F0040300000, G06N0003045000, G06V0010764000, G06F0016350000, G10L0015300000	(71) <b>Name of Applicant :</b> <b>1)RVR &amp; JC COLLEGE OF ENGINEERING</b> Address of Applicant :CHANDRAMOULIUPURAM, CHOWDAVARAM, GUNTUR PIN - 522 019 CHANDRAMOULIUPURAM Andhra Pradesh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)Dr. J. Ravindranadh</b>
(33) Name of priority country	:NA	<b>2)Bade Uday Kiran</b>
(86) International Application No	:	<b>3)Bobbala Rajya Lakshmi</b>
Filing Date	:01/01/1900	<b>4)Chittiprolu Preethi</b>
(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 hybrid system and method for emotion detection in text that integrates contextual embeddings with rule-based disambiguation. Textual data is acquired and preprocessed before being encoded into embeddings using transformer-based models. An initial classifier generates predictions, which are refined by a rule-based disambiguation engine addressing ambiguity, sarcasm, and negation. An aggregation module fuses neural predictions with rule outputs to yield a final classification. The invention improves accuracy, interpretability, and efficiency compared to conventional approaches, offering a scalable and domain-adaptive solution for emotion-aware applications across multiple languages and industries.

No. of Pages : 15 No. of Claims : 10