

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511095947 A

(19) INDIA

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

(43) Publication Date : 05/12/2025

(54) Title of the invention : AN INTELLIGENT CHATBOT SYSTEM FOR CONTEXT-AWARE CUSTOMER SERVICE SUPPORT

(51) International classification	:H04L0051020000, G06N0020000000, G06F0040300000, G06N0005040000, G06F0040350000	(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)VIVEK RANJAN
(33) Name of priority country	:NA	2)AJAY KUMAR
(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 intelligent chatbot system for context-aware customer service support, comprising a Natural Language Processing Module (101), Contextual Memory Engine (102), Sentiment Analysis Unit (103), Knowledge Base (104), Escalation Manager (105), and Omnichannel Interface (106). The system ensures multi-turn contextual understanding, personalized interactions, sentiment-aware responses, seamless cross-platform synchronization, and intelligent escalation to human agents. It enhances customer satisfaction, reduces operational costs, and continuously improves through reinforcement learning.

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