

**MKT09**

## **FACIAL SENTIMENT RESPONSIVE CHATBOT SYSTEM**

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### **Abstract**

The rapid expansion of chatbot technologies has transformed consumer engagement, with advancements in machine learning paving the way for more sophisticated interactions. Despite this progress, a critical barrier to further adoption of chatbots remains their inherently impersonal nature. Our research investigates the integration of multimodal machine learning tools, specifically facial recognition, to enhance the personalization and engagement of chatbot interactions. By developing and evaluating a chatbot system capable of detecting and responding to users' emotions through facial expressions, we introduce a novel dimension of interactivity to chatbot communication. Our findings from two studies demonstrate that chatbots equipped with facial sentiment detection capabilities foster higher levels of user engagement compared to those lacking this feature. This investigation marks an initial effort to assess the impact of facial sentiment recognition within chatbot systems.

### **Conference Track**

Marketing