Revolutionizing User Engagement: Integrating Chatbot Technology for Real-Time Assistance and Interactive Dialogue in Human-Robot Interaction

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Abstract: *This research paper explores the integration of chatbot technology to revolutionize human-robot interaction, focusing on enhancing user engagement through real-time assistance and interactive dialogue. The study delves into the architecture, functionalities, and practical applications of chatbot integration in robots, aiming to optimize user experience and interaction dynamics. Advancements in artificial intelligence and robotics have led to the development of innovative applications, one of which is the integration of chatbot programs into robots for guiding and engaging in real-time conversations with users. This research article presents an in-depth exploration of a robot equipped with a chatbot program, designed to assist users in various tasks while maintaining interactive and responsive communication. The study discusses the architecture, functionality, and practical implications of such a system, highlighting its potential in enhancing user experience and addressing challenges in human-robot interactions.*

Keywords: chatbot technology

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