

Multimodal Interaction Techniques: Combining Gestures, Voice, and Touch

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Abstract: *Human-computer interaction (HCI) is constantly evolving, aiming for a more natural and intuitive experience. Multimodal interaction techniques, which combine gestures, voice, and touch, offer a promising approach. This research explores the potential of these techniques, investigating how users interact with systems that combine these modalities. The research utilizes a qualitative design with thematic analysis to examine user experiences and identify emerging themes. Findings reveal that users appreciate the flexibility and efficiency offered by multimodal interaction. Combining gestures with voice commands allows for faster task completion and improved control. Touch interaction provides a familiar and precise way to refine selections made through voice or gestures. However, the study also identifies challenges such as the need for clear feedback mechanisms and the importance of intuitive gesture design.*