

A Review of Augmented Reality-Based Human-Computer Interaction Applications of Gesture-Based Interaction

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Abstract

In recent years, augmented reality (AR) is an extremely growing field in information technology, computer science, and computer engineering. Although there are many recent works that use augmented reality for different purposes, most of the existing works do not focus on reviewing recent augmented reality-based human-computer interaction applications regarding gesture-based interaction. Therefore, we focus on a different goal from them. In this paper, we study robust methodologies that researchers have recently achieved gesture-based interaction for using in augmented reality-based human-computer interaction (HCI) applications. To begin with, we explore the recognitions of hand gestures using augmented reality. Next, we explore the possibilities of utilizing augmented reality for gesture-based interaction. We also give a suggestion and present a future scenario for gesture-based interaction and augmented reality. We believe that this would help the interactions that humans would have with modern innovations in an integrated cross-disciplinary area in the near future of human-computer interaction.

Keywords

Augmented reality Human-Computer interaction Gesture-based interaction Hand gestures

Distance transform Multimodal augmented reality Mixed-scale gesture design

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Notes

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