



Location-Based Augmented Reality Games Through Immersive Experiences

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Abstract

Augmented reality (AR) is an immersive experience of a physical world environment which is enhanced by virtual objects, offers interesting ways of human-computer interacting. Because location-based augmented reality allows people to enhance virtual information to geographical points of interest at specific predefined geolocations, it can help researchers to create amazing applications and augmented reality games in a different way. More recently, due to the technology's capacity and recent innovation, location-based augmented reality has been extremely popular by using geo-based features to create a new immersive experience. This paper presents a novel summary of pioneering location-based augmented reality systems and games through immersive experiences, including our own research, in an interdisciplinary augmented cognition perspective. To begin with, we explore location-based augmented reality researches, starting from non-game works such as SPIRIT and IntelligShop. Then, we discuss pioneering augmented

reality games, particularly well-known games, since the early of the twentieth century until now, including Human Pacman, ARCarGame, Pokémon Go, and AR Mario Kart Live. We finally give a recommendation and predict a future scenario for location-based augmented reality systems and games.

Keywords

Location-based augmented reality Augmented cognition Human pacman ARCarGame
Remote-controlled car Pokémon go AR Mario Kart live
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Notes

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