

Applying augmented reality (AR) technology in wayfinding and signage systems for improving user interaction

Dr. Samah Haroun Abd-Elsalam

6 October University Faculty of Applied Arts – advertising department Lecturer in

samah.haroun.art.@o6u.edu.eg

Abstract

Environmental design is the latest way to provide a good life for the user, and with increased mobility, there is a need for interactive wayfinding systems that provide quality user experience. Most public places use traditional methods and means to support and share visitors with wayfinding systems. However, the interactive needs of visitors are not met through traditional means. Hence, the research aims to improve the participation and interaction of visitors in different environments by using augmented reality and integrating it into wayfinding systems for public places with traditional means. The research also aims to simplify the cognitive effort required for the user, enhance their interaction, and promote multi-sensory participation within the place. Augmented reality is a technology in which three-dimensional virtual images intersect with real environments, changing the concept of the real-world environment, providing an interactive experience that improves user experience. Augmented reality can effectively improve the efficiency of wayfinding systems, and these virtual environments can be an effective tool for collaborative design. The study uses a descriptive-analytical methodology to study the importance of integrating augmented reality into wayfinding systems. It also uses an experimental approach to the augmented reality technology in the signs used in some student projects for the course of "direction and guidance signs systems 2" alongside traditional static signs for public places.

Keywords:

Environmental Design - Augmented Reality – Interactivity