

Current Research Trends in the User Experience of Mobile Augmented Reality: Content and Bibliometric Mapping Analysis

Joshua Torres^a, Daniel Orłowski^a

^aUniversity of Wisconsin-Milwaukee, USA

Jjtorres@uwm.edu, DannyOrłowski@gmail.com

ABSTRACT

The aim of this work is to highlight research trends between 2015 to 2020 in the study of mobile augmented reality's user experience by conducting a content analysis and bibliometric mapping analysis of MAR research literature. This study dissects the different research design types chosen by mobile augmented reality (MAR) authors. In addition to illuminating design types, this study also uncovers trends in data collection, sampling, and analysis. In recent years, the benefits of MAR applications have been lauded due to their ability to present information in different learning experiences. MAR applications enable the combination of virtual and real-world objects by way of superimposing digital objects and auditory triggers onto reality, providing the user with real-time interaction and feedback opportunities. MAR is unique in comparison to other augmented reality technologies in that MAR leverages an already ubiquitous hardware: the cell phone. This aspect of MAR is increasingly utilized by both educators and cultural heritage institutions to package material through interactive and innovative approaches. However, researching the user experience in MAR applications is particularly difficult due to its broad reach into many disparate fields of study. This research highlights the diversity of disciplinary perspectives and methods used in mobile augmented reality research in order to exhibit the subject areas in which its impact is greatest.

ALISE RESEARCH TAXONOMY TOPICS

augmented reality; data visualization; mobile systems; user interfaces

AUTHOR KEYWORDS

mobile augmented reality; multimedia systems; user experience