World Academy of Science, Engineering and Technology
International Journal of Information and Communication Engineering
Vol:9, No:03, 2015

Systematic Process for Constructing an Augmented Reality Display Platform

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Abstract : In this study, it is attempted to construct an augmented reality display platform (ARDP), and its objectives are two facets, i.e. 1) providing a creative display mode for museums/historical heritages and 2) providing a benchmark for human-computer interaction professionals to build an augmented reality display platform. A general augmented reality theory has been explored in the very beginning and afterwards a systematic process model is proposed. There are three major core tasks to be done for the platform, i.e. 1) constructing the physical interactive table, 2) designing the media, and 3) designing the media carrier. In order to describe how the platform manipulates, the authors have introduced Tainan Confucius Temple, a cultural heritage in Taiwan, as a case study. As a result, a systematic process with thirteen steps has been developed and it aims at providing a rational method for constructing the platform.

Keywords : human-computer interaction, media, media carrier, augmented reality display platform
Conference Title : ICCVAD 2015 : International Conference on Communication, Visual Arts and Design
Conference Location : Istanbul, Türkiye
Conference Dates : March 23-24, 2015