Augmented Reality with interactive interfaces

Martin Varga, Branislav Sobota, Frantisek Hrozek, Stefan Korecko

Department of Computers and Informatics Faculty of Electrical Engineering and Informatics Technical University of Koice, Slovakia

Martin.Varga@tuke.sk, Branislav.Sobota@tuke.sk, Frantisek.Hrozek@tuke.sk, Stefan.Korecko@tuke.sk

The Augmented Reality (AR) merges a real world and a virtual environment. A virtual object is added into a real world in order to improve or to add more information for an observer. AR is computer-generated data integration with the real world, which among others can be done with computer graphics rendering on a real-time footage. The paper presents a concept of design AR system used two head mounted displays (HMD). Two users can see via HMD the same virtual scene in their own real environment. The users can change 3D objects in AR scene directly using data gloves. We develop interactive AR system for the communication between user and a virtual environment in LIRKIS (Laboratory of Intelligent Interfaces of Communication and Information Systems).