Augmented reality technology as an alternative to the personal assistant for people with special needs

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Abstract:
Sustainable development is concerned with people with special needs as they are idle human power that represents a burden on the development process. This needs to be developed through care, to convert it into effective energy through their integration into society and their relationship with it. However, we find that the new state of human civilization brought by modern technologies and trends during the second half of the twentieth century, characterized by amazing achievements in computer technologies and means of communication, such as the use of augmented reality in the field of electronic publishing, which integrates Virtual items by adding digital data in real life; although in the same time, it neglected the human problems associated with this new state of civilization, as we notice the relative decrease in the interest of the scientific community and society, with the problems and challenges of people with special needs. The research aims to help people with special needs (blind / deaf and dumb) to dispense with a personal assistant through the use of augmented reality technology. The research uses the experimental descriptive approach to describe augmented reality as one of the tools of modern technology, and how to use it to help people with special needs merge them into society, facilitate dealing with their daily activities by conducting practical applications through developing the design for an electrical device package using that technology, and using a questionnaire, to measure to how extent of the target group's ability to deal with it, and how to become a substitute for the personal assistant. The results of the research revealed that augmented reality is one of the effective means of direct and indirect communication and interaction between the sender and the receiver, which has a positive effect on the receiving audience, thus facilitating and understanding the goal of the message presented. Augmented reality can be an effective alternative for the personal assistant for people with special needs, by communicating information using various multimedia, eliminating the need to ask or seek help from another person.

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