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Some Novel Applications of VR in the Domain of Health

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Abstract

Recent progress in virtual reality (VR) technologies make immersion more accessible to everyone, and, in particular, developments aimed at the entertainment industry are being brought into to the domain of health.

The main uses of VR in health are of two forms.

First, it is a new method to diagnose and to treat patients; second, it is a new method to train and/or teach healthcare and emergency-response professionals.

There are several reasons for using VR in healthcare. First, virtual environments (VE) are fully under control, so that the user (patient or professional) is then safe from any harm and the session can be interrupted if necessary. Second, there are many instances where placing the user in a real environment would be very hard to do and/or very costly. A major advantage of VR is that this user can instead be immerged in an equivalent artificial/virtual environment through the use of immersive technologies. Third, with regard to teaching, a significant advantage of VR is that it allows one "to bring the body to learning", thereby effectively embedding new knowledge into the muscles.

Below, we describe several uses of VR at our university in the domain of health.

Keywords

Virtual reality Virtual reality applications

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