

MR-Implantology: Exploring the Use for Mixed Reality in Dentistry Education

Authors : Areej R. Banjar, Abraham G. Campbell

Abstract : The use of Mixed Reality (MR) in teaching and training is growing popular and can improve students' ability to perform technical procedures. This short paper outlines the creation of an interactive educational MR 3D application that aims to improve the quality of instruction for dentistry students. This application is called MRImplantology and aims to teach the fundamentals and preoperative planning of dental implant placement. MRImplantology uses cone-beam computed tomography (CBCT) images as the source for 3D dental models that dentistry students will be able to freely manipulate within a 3D MR world to aid their learning process.

Keywords : augmented reality, education, dentistry, cone-beam computed tomography CBCT, head mounted display HMD, mixed reality

Conference Title : ICARE 2022 : International Conference on Augmented Reality for Education

Conference Location : Rome, Italy

Conference Dates : June 02-03, 2022