

Abstract

Medical education is a dynamic field that witnesses continuous evolution and development. The employment of Virtual Reality (VR) based visualization and training environments in the delivery of anatomy teaching transfers the learning experience from one that involves memorising the structures without a true understanding of the 3-Dimensional (3D) relations, to a process that involves a thorough understanding of the structure based on visualisation rather than memorising, which makes the learning process more efficient and enjoyable, and less time consuming. This paper describes the development of a Virtual Reality and 3D visualisation system for anatomy teaching. The developed system offers a real-time 3D representation of the heart in an interactive VR environment that provides self-directed learning and assessment tools through a variety of interfaces and functionalities. To ensure the accuracy and precision of the developed system it was evaluated by a group of medical professionals.

Keywords

Medical education, Virtual reality, Anatomy, 3D, Heart