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SPHERICAL VIDEO RECORDING AND POSSIBLE INTERACTIVE EDUCATIONAL USES

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ABSTRACT

Although videos are common instructional materials, traditional videos don't let users to view the environment from different angles and there is no interaction. On the other hand, creating virtual interactive environments are expensive, time consuming and also it's difficult to create environments which reflects the real world. Spherical videos have the advantage of reflecting the environment as it is. It takes less time and effort to record. There is no need for an extra player or software other than Adobe Flash based players to display interactive spherical videos. Video files can be streamed over the internet or can be transferred using flash disc, CD etc. Recorded spherical videos can also be used in 3D applications as background.

Interactive Flash Panoramic video, by the help of approximately 360° view, lets user to focus any point on the screen he/she wishes by using his/her mouse while video is playing or stopped. Learning can be strengthened by watching the video multiple times from different angles. As an addition to these, embedding objects (sound, picture, text, graphic, movie, and links) makes panoramic videos interactive. Learner has unique learning experience by interacting with the objects during the film.

In this paper, interactive video was created using a spherical video camera discussed employing the example of educational uses. For this aim, the videos which were shot by using spherical video camera were made interactive using Ladybug PRO, Lucid Viewer and XML. This study shows how spherical videos can be prepared as an instructional material.

Keywords: Spherical video camera, education, panorama, interaction.