

An Online 3D Modeling Method Based on a Lossless Compression Algorithm

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Abstract : This paper proposes a portable online 3D modeling method. The method first utilizes a depth camera to collect data and compresses the depth data using a frame-by-frame lossless data compression method. The color image is encoded using the H.264 encoding format. After the cloud obtains the color image and depth image, a 3D modeling method based on bundlerefusion is used to complete the 3D modeling. The results of this study indicate that this method has the characteristics of portability, online, and high efficiency and has a wide range of application prospects.

Keywords : 3D reconstruction, bundlerefusion, lossless compression, depth image

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