

(54) Title of the invention : A METHOD FOR VOLUMETRIC VIDEOGRAPHY SYSTEM USING NEURAL RADIANCE FIELDS

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(57) Abstract :  
 Disclosed herein is a method for volumetric videography system using neural radiance fields. The method (100) for volumetric videography system capturing images/videos along with five-dimensional (5D) information including data on position (x, y, z) and viewing direction (?, ?) and then converting the captured images/videos and information into voxels. Thereafter, hashing the voxel vertices and storing the hashed voxel vertices in the lookup table. Thereafter, searching for specific data item based on the hashed value in the lookup table and estimating the value between data points through linear interpolation. Thereafter, concatenating the interpolated segment to create a single continuous dataset and training neural radiance fields (NeRF) network using rendering loss. Subsequently, performing volume rendering through a neural radiance fields (NeRF) network. Thereafter, rendering new view emitting information on color (R, G, B) and density (?) and displaying the three-dimensional (3D) reconstruction.

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