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Implementation of 3D Virtual Space Documents using Image Information in Real Time

Ha-Young Cheong*, Tae-Woo Kim**, Chong-Hwan Choi***

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Abstract As the information society developed rapidly now, office software based on IoT has released along with office appliances that we encountered in everyday life, providing more convenient services. Now a days, in addition to writing documents for recording, it has importance to create documents for effective document presentation and information transmission. In this paper, we have been presented and designed in 3D virtual space from 2D for effective information transmission in real time. The suggested program, which implements part of the design, enables the voice and visual information to be effectively communicated while conveniently exploring or showing documents in a virtual 3D space. It provides a method of automatically placing documents in 3D virtual space, designing virtual camera movements that effectively explore them, and suggesting how to connect voice information to each document in real time.

Key Words : Designed in 3D, Information transmission, 3D virtual spacevirtual space Voice information, Real time

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1. 2D
 Fig. 1. The conventional 2D sight view

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2.2.1 Open GL

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 Fig. 2. The concept of 3D presentation documents lay out

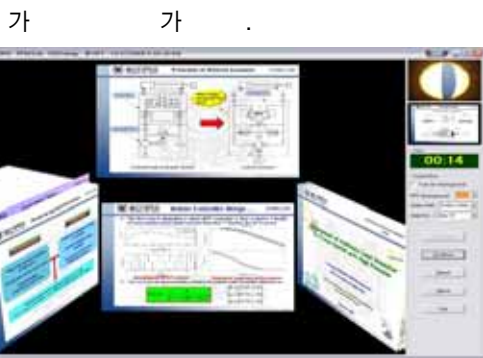
[2] 가 Task Gallery
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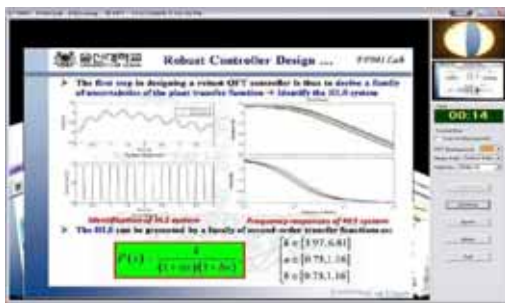
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3. 3D documents view
Fig. 3. Implementation of 3D documents view

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4. Presentation main slide
Fig. 4. Presentation main slide

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Fig. 5. A method of listing by spatial axis expansion



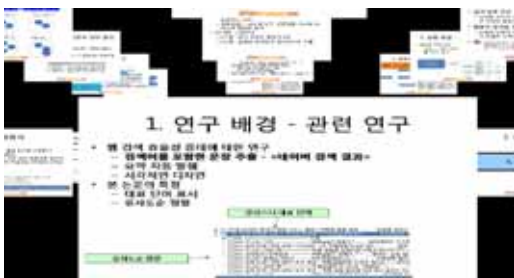
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Fig. 6. The 3D view implemented based on design

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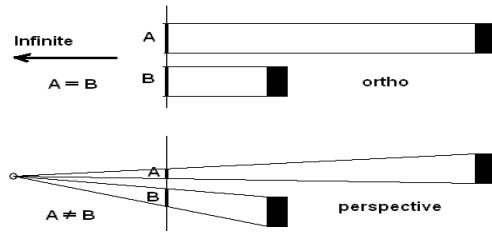
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Fig. 7. The camera acting movement technique



8.
Fig. 8. The result of acting camera movement

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Fig.9. Orthographic projection & rspective projection

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