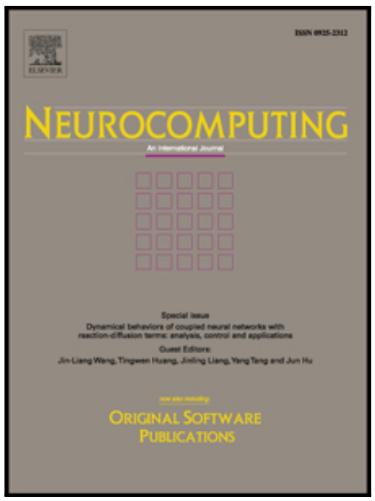

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Virtual Reality Geographical Interactive Scene Semantics Research for Immersive Geography Learning

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Abstract

A virtual reality based immersive glasses technology for obtaining primary geography learning has been proposed, synthesizing a number of latest information technologies simultaneously, including HCI, namely multimodal human-computer-interaction, GIS, 3D geographical information system and VR, virtual reality. By the virtual reality glasses, a geographical software can provide an immersive environment of geographic structure. The major functions of the software part this system are consisted of 3D space intersection detection, 3D topology analysis, Space convex decomposition, Space convex hull calculation, overlay analysis and buffer analysis. The multimodal technologies have been adopted by the system to promote users' perceptions.

Keywords: VRGIS, Geography Learning, Virtual Reality, GIS

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