VRML 互動建模與參數回饋機制應用於結構工程軟體之探討

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摘要

由於電腦與網際網路的快速發展，使得目前土木工程領域虛擬實境的相關應用更為廣泛。除了將結構設計的結果利用 3D 虛擬方式來展示、檢核之外，更導入了互動性的概念，使用者有更好的操作彈性，可借著與虛擬場景作互動性溝通來取得想要的資訊。本論文研究的虛擬實境語言為 VRML，結合 Java、Servlet、Ajax 等程式語言來探討虛擬場景與使用者之間的互動性

關鍵字: 虛擬實境、互動性、參數回饋、VRML、Java、Servlet、Ajax

Application of Interactive VRML Model Generation and Study Parameter Feedback Mechanism in Structural Engineering Software

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ABSTRACT

Because of the fast development of computers and Internet, the applications of virtual reality in civil engineering become more extensive at present. Besides the use of 3D virtualization to show and examine the results of structural designs, introducing the concept of user interaction gives engineers better operational flexibility. We can get the information we want by interacting with virtual scenes. VRML is the virtual reality language used in this research. Combined with other programming languages, such as Java, Servlet, Ajax, etc.

Key Words: Virtual Reality, Interaction, Parameter Feedback, VRML, Java, Servlet, Ajax

始單純之計算，發展出二維圖形模式，其