Application of Dynamic Response of Real-time Collision to Virtual Reality

廖堉惠、陳俊達

E-mail: 9607545@mail.dyu.edu.tw

ABSTRACT

This main purpose of thesis is probing into the motion state of the object before and after collision of the virtual reality is detected and examines and imitates and collides immediately. Offer the initial speed of object at first, in the course of moving of object, will meet and collide to happen, to calculate the motion state after colliding and represent and collide simulation immediately with the virtual reality. This text cooperates with the function library of OpenGL to draw out models again based on OBJ model file. Dynamic simulation part, also use the function library of OpenGL to upgrade the picture way repeatedly, and depend on the illusion of the photogene, and finish the realization of the motional simulation. Procedure respect, use ++ Visual C and MFC window procedure write one user interface window, make user can simulate collision of the procedure entirely through simple operation. Hope to offer the relevant teaching and reference of research.

Keywords : Virtual Reality ; Collision

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