

Applying Virtual Reality to Entertainment

Zhigeng Pan

This talk is composed of two parts. The first part is a survey for applying Virtual Reality to digital entertainment. As we know, virtual reality has been applied to many fields such as visualization, architecture, education, medical science, sports simulation et al. Game and entertainment is an important application of virtual reality. There are a lot of research and development results around world. The second part is the introduction of research and development works in digital entertainment field from the speaker's group, including EasyBowling (a VR-based virtual bowling machine), PCSMASH (a VR-based ping-pong game in CAVE environment); Virtual Squalidom (a virtual environment composed of virtual fishes), M3D (a game platform for mobile devices), et al. Finally, I give some suggestions for future research directions.

Biography: Zhigeng Pan received his Bachelor Degree and Master Degree from the Computer Science Department in 1987 and 1990 from Nanjing University respectively, and Ph.D Degree in 1993 from Zhejiang University. Since 1993, he has been working at the State Key Lab of CAD&CG on a number of academic and industrial projects related with distributed graphics, virtual reality, multimedia. He has published more than 70 papers on international journals, national journals and international conferences. He is the author or co-author of four books related to computer graphics. He acted as one of the Guest Editors of a Special Issue of Computers & Graphics ("Computer Graphics in China"). He acted as the content editor, and edited the special issue "Virtual Reality in China" in 1999 for International Journal of Virtual Reality.

Dr. Pan is a member of SIGGRAPH, Eurographics, IEEE, a senior member of the China Image and Graphics Association. He is on the director board of the International Society of VSMM (Virtual System and Multimedia), a member of IFIP Technical Committee on Entertainment Computing (acting as representative from China).

Currently, he is the executive Editor-in-Chief of The International Journal of Virtual Reality. He is on the editorial board of International Journal of Image and Graphics, International Journal of CAD/CAM, Journal of Image and Graphics, Journal of CAD/CG, et al. He is the Depute Director and the General Secretary of the Virtual Reality Committee, China Society of Image and Graphics; the Depute Director of the Machine Perception and Virtual Reality Committee, China Association of Artificial Intelligence; the Steering Committee member of VRCAI series conference. He is the organizing committee chair of VRAI'2002, the co-chair of the organizing committee of VRAI'2003, ICIG'2002, Eurographics/ACM SIGGRAPH Workshop on Computer Graphics Education'2004, ICIG'2004. He is the program co-chair of EGMM'2004(Eurographics workshop on Multimedia), Edutainment'2005 and VEonPC'2005, and will be the program co-chair of Edutainment'2006, ICAT'2006.