Editorial

Cyber Games and Interactive Entertainment

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Computer games and interactive entertainment have gained much attention recently in the domain of digital media. They are now being applied or used in many areas such as entertainment, education, training, and art. Today, the computer games and interactive entertainment market is highly competitive. In this special issue, all the submissions are invited papers which are extended from original conference papers that were published in the Proceedings of CyberGames 2006 and 2007: International Conference on Games Research and Development, and the Proceedings of the Third Australasian Conference on Interactive Entertainment (IE 2006). This special issue aims to present the latest works on new techniques and applications in the area of cyber games and interactive entertainment. A total of 29 papers have been submitted to this special issue, of which 20 high-quality papers have been accepted after the peer review process. This special issue starts with the first paper entitled “A gameplay definition through videogame classification” by D. Djaouti et al. In their paper, the authors focused mainly on defining game play through some kind of videogame classification. The work presented in this paper is a part of a bigger and global experiment attempting to understand game play better with a study of the nature of videogames. Since game play is an important component in any interactive entertainment design, this work provides some interesting contribution to the field. Still along the area of game play, the second paper is by C. A. Lindley and C. C. Sennersten and is entitled “Game play schemas: from player analysis to adaptive game mechanics.” It looks at the use of schema theory and model to understand the cognitive processes underlying game play. This paper examines both the predesigned schema as well as using adaptive game mechanics. In game design, story and narration have become an important area to enhance the game play. The paper by Dan Pinchbeck, “Story and recall in first person shooters,” looks into the area of storytelling specifically for the games of first-person shooters (FPSs). With the advancement of technologies, FPS games are able to deliver the high expectation of incorporating a story into the game play. The whole idea of storytelling is to gain the interest of the game players and to perform some indirect control on the players by leading them through the game-play experience. Audio and music have been quite powerful in delivering part of the objective of gaining interest and performing indirect control. The work presented by M. Grimshaw and G. Schott, “A conceptual framework for the analysis of first-person shooter audio and its potential use for game engines,” is also useful for achieving such objectives. This paper proposed a new conceptual framework for the design of audio used for developing FPS games. The authors suggested that the framework could allow better immersive experience when playing FPS games. The next paper by M. Eyles and R. Eglin, “Ambient games: revealing a route to a world where work is play,” also suggested that audio and music are important in developing good game play. They have introduced a term called “ambient games,” which is basically evolved from the concepts of ambient music. They have showed in their paper how to set this concept of ambient games in the technological context. One of the important areas of cyber games and interactive entertainment is graphics. With the advancement of technologies, graphics presented today are much more complex compared to about five years ago. However, researchers are still aiming to find more effective and efficient algorithms for generating better graphics. The paper by S. Raman and Z. Jianmin, “Efficient terrain triangulation and modification algorithms for game applications,” presented an efficient terrain generation algorithm. The proposed algorithm is based on constraint conforming Delaunay triangulation. The paper by M. White, “Real-time optimally adapting meshes: terrain visualization in games,”
presented discussions on some of the factors that will affect the terrain visualization in games. It is always challenging to present high-quality scenes through the graphics hardware especially in real-time interactive graphics applications. This paper provided some implementation suggestions that could enhance games and interactive entertainment. Animation is becoming an essential requirement for most interactive entertainment applications, the paper by J. Qiu et al., “Auto coloring with enhanced character registration,” presented an autocoloring algorithm using an enhanced-character registration technique. The approach presented can be used for practical animation sequence in achieving high-coloring accuracy.

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