Abstract

No matter how advance the game AI is, it falls victim to repetitive behavior which after certain interval starts representing a pattern in the game which the user can exploit frequently. The elimination of this loophole will not only help the game AI to better counter the user behavior but also help it to learn and improve itself. This will enhance user experience and encourage him to think and act in a different manner while keeping the difficulty level same. As the modern day games strive to perfectly emulate human behavior in their AI, they still fall short of embedding human intelligence and are unable to inject their AI with the aspect of rational thinking. The field of AI has seen remarkable growth and the advent of very sophisticated and accurate techniques to model user behavior which can help the field of game development to finally achieve a seamless transition from satisfactory to a prolonged exciting experience. This paper analyses the need to overcome the above mentioned issues and discusses the techniques to do so. The algorithms proposed in this paper achieve a common goal taking different approaches; these are DDA (Dynamic Difficulty Adjustment) for FPS games and DADA (Dynamic Adaptability using Data Analysis) for others. These techniques incorporate dynamic learning, elevating the games to become ever challenging and highly enjoyable instead of being
monotonous.

References

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Index Terms

Computer Science    Artificial Intelligence

Keywords

DDA    FPS    DADA