

Integer Programming-Based Generation of Difficulty Level for a Racing Game

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Abstract : It is one of the important design issues to provide various levels of difficulty in order to suit the skillfulness of an individual. In this paper we propose an integer programming-based method for selecting a mixture of challenges for a racing game that meet a given degree of difficulty. The proposed method can also be used to dynamically adjust the difficulty of the game during the progression of playing. By experiments, it is shown that our method performs well enough to generate games with various degrees of difficulty that match the perception of players.

Keywords : level generation, level adjustment, racing game, ip

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