Some Steps Toward Games for Art Exposition

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abstract

What is the best way to expose artworks to massive audiences? Arguably, one such a solution is to exploit live streaming, which is gaining more and more spectators these days. Our findings (cf. list of publications in https://dblp.org/search?q=%3ARuck_Thawonmas) stemmed from applying artificial intelligence (AI) techniques to game live streaming where the game background is a varying ukiyo-e image, which is selected from landscape ukiyo-e from the Ukiyo-e Portal Database maintained by Art Research Center, Ritsumeikan University. In addition to maximizing entertainment, our work is focused on promoting well-being among spectators. Games used in this study include a fighting action game and a puzzle action game. former, called FightingICE, is developed and made (http://www.ice.ci.ritsumei.ac.jp/~ftgaic/) by our laboratory while the latter, called Science Birds, by another group (https://github.com/lucasnfe/Science-Birds), both for research purpose. Examples of AI techniques in use include Monte-Carlo tree search, recommender systems, deep learning. From the perspective of health promotion, proper live streaming leads to an increase in positive affect and a decrease in negative effect, enhances working memory, and strengthens a social factor.