Editorial: Entertainment computing and persuasive technologies

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Editorial on the Research Topic
Entertainment computing and persuasive technologies

In today's software systems, the design of human-computer interaction has evolved beyond mere considerations of usability and efficiency. It is increasingly recognized as a powerful instrument for influencing behaviors and attitudes. Within this context, the integration of entertainment and persuasive technologies has become a mainstream approach, significantly contributing to the emergence of a new generation of technologies across diverse domains. The broad application of this approach, as illustrated by the works presented in this Research Topic, underscores its adaptability and effectiveness across different domains ranging from education and social media to those dedicated to promoting wellbeing.

This Research Topic introduces a collection of scientific articles exploring cutting-edge developments in different research areas. The selected articles demonstrate how the intersection of entertainment and persuasion can contribute to societal betterment. Addressing diverse issues, such as the environment, health, social challenges, and cultural advancement, these articles span multidisciplinary domains, including computer science, design, digital media, interactive art, and psychology. This collection of scientific articles highlights the potential of this approach embedded in interactive media, art, and gaming. Each article demonstrates the convergence of advanced technology and creative endeavors, functioning not solely as sources of entertainment but also as effective avenues for educational, communicative, and behavioral influence.

Next, in this editorial, we introduce and provide a brief overview of the five papers composing this Research Topic in *Entertainment computing and persuasive technologies*.

Point of Equilibrity (PoE), a narrative game simulating the decision-making process during a health crisis, is presented in the paper by Chrysanthi et al. The game considers the balance between peoples' satisfaction and the pandemic control measures and unfolds according to the player's decision, who takes the role of the government, leading to four different possible endings. The paper describes a user study performed to analyze the effect of PoE gameplay on the players' perspective regarding pandemic management and to examine the effect of users' preferences and attitudes on the decision-making process as well as its correlation with personality traits relevant to decision-making.

Even et al. propose a protocol to evaluate the believability of computer players in multiplayer videogames. They studied the challenges involved in the believability assessment, developing a system that partially automates the evaluation process. Then,

they conducted three experiments that allowed them to achieve a final protocol proposal adapted to different videogame genres involving the use of reporting forms that alert users to the presence of bots. The paper guides the readers through their trial-and-error approach and presents encouraging conclusions.

Sakuma et al. also study the use of computer generated characters by comparing avatars to human presenters in product promotional videos. What characteristics have an impact on the persuasiveness of virtual influencers? This inspired Sakuma et al. to perform a user study with 318 participants. Using a between-subjects experimental design, participants watched product promotional videos on YouTube, presented by either humans or avatars. Participants' feedback was collected through pre and post questionnaires. The procedure, as well as the corresponding results, are described in the paper and contribute to the understanding and future design of interaction with avatars.

Krzyzaniak et al. explore what makes interactive art engaging. They report four independent controlled user studies, each testing one hypothesized promoting engagement property, such as the number of controllable parameters or the use of fantasy. In each study variants of a different artwork are presented. Participants were able to interact with the different artworks through the Internet, data regarding that interaction was collected, such as the time spent on the page, and conclusions were derived.

As the title suggests, Silva et al. present a retrospective analysis and systematic review of the areas of *Entertainment computing and persuasive technologies* for health. The authors present an in-depth analysis of the research addressing the use of *Entertainment computing and persuasive technologies* in health, delivering a detailed description of the review methodology, and contributing to provide a comprehensive understanding of how it progressed, the limitations that still exist, and the future possibilities to be followed.

We hope that this Research Topic will provide you with an entertaining and rewarding reading experience.

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