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Carlos Vaz de Carvalho · Paula Escudeiro António Coelho (Eds.)

Serious Games, Interaction, and Simulation

5th International Conference, SGAMES 2015 Novedrate, Italy, September 16–18, 2015 Revised Selected Papers



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Preface

These proceedings represent the work of researchers participating in GAMES 2015, the 5th International Conference on Serious Games, Interaction and Simulation that took place at e-Campus University, in Novedrate, Italy, during September 16–18, 2015. This conference is a multidisciplinary approach to the presentation of research, theory, application, practice, and validation in the field of serious games for any level and any area. It covers areas such as cognition, psychology, technology-enhanced education, evaluation and assessment, multimedia, and information technology.

The program of SGAMES 2015 was focused on distinct areas from tools and applications to the advancements in core issues of serious games design and development. One of the major applications areas is education; contributions range from gamified approaches towards preventing school leaving, a virtual city model to foster mathematics and science in secondary education students, an exploratory study on the role of chess playing in the teaching of mathematics, another study that investigates to what extent the use of sensitizing techniques can help children design a serious game, the analysis of the relationship between game genres and competence development, and the knowledge improvement of dental students through an online serious game. Another area focused on is accessibility, both for disabled people and elderly people. From a game that aims to make the process of learning sign language easier and enjoyable, or a method for applying the effort of university students to the benefit of Down's syndrome children, to serious games for attention training and cognitive stimulation of the older adults. Another paper proposes new ways of guiding players' actions toward image and video crowdsourcing. Regarding tools, a model-driven authoring framework is proposed as high-level authoring environments for nontechnical domains. In the core issues of serious games design and development, the contributions range from dynamic serious games balancing to a preliminary version of a serious game quality model. Beside serious games, gamification is also approached in two papers, from fostering learning engagement toward preventing early school leaving to the integration of building information modeling (BIM) together with the emergent Internet of Things (IoT).

We hope you enjoy these articles and profit from them as much as we did editing them. The quality of the contributions shows tremendous potential for a bright future. See you at SGAMES 2016.

March 2016

Carlos Vaz de Carvalho Paula Escudeiro António Coelho

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