

Guest Editorial

Foreword to the Special Issue of SBGames 2013

More than a mandatory field for nowadays' industrial exploration, Digital Games became an extremely important research area inside the wide range of Computer Science. Such area cannot be left on the sidelines, neglected to a secondary place as a subfield of Computer Graphics or Human-Computer Interaction: it has its own particularities and idiosyncrasies, mainly regarding to its inherently multidisciplinary essence, where the Interactivity is taken to its extreme.

It is commonsense among scholars that Computer Graphics, Human-Computer Interaction, Computer Architectures, Art and Narrative, among other areas, must go hand in hand when dealing with Digital Games' development and research. That bridge has already been crossed, even though this amalgam is hard to be built in practice.

This JIS Special Issues on Digital Games looks for bringing some contributions on these topics, presenting four articles that represent extended versions of four of SBGames (Brazilian Symposium on Games and Digital Entertainment) 2013 Computer Track selected as best papers. The varieties of topics that are covered by these papers characterize an invitation for readers to have a glimpse about some key research areas on Digital Games.

The paper "*Which features matter to make a successful mobile game?*" brings some light to the discussion about which aspects are determinant for the success – or failure – of a mobile digital game. Here, the terms "success" and "failure" refer to the number of downloads and gross revenue on online app stores. A total of 37 game features were analyzed by authors to study how each of them influence – in a negative or positive manner - mobile games' performance on online stores.

In "*Exploring Energy Management on GPUs in Game Architectures*", the authors deal with a very relevant subject, which is intelligent energy management for games and interactive systems. This topic arises from the crescent processing capacity of multicore CPUs and GPUs, which allows more sophisticated games and real-time simulations, but also leads to bigger energy consumption, an important matter for mobile computing. In this sense, the paper presents a new management strategy for GPU energy consumption, based on a multi-threaded game loop model.

The authors of "*Accessibility Study of Touch and Gesture Interaction with Seniors*" brings an exciting discussion about the differentials that gesture-based game interfaces could bring to the accessibility of the senior population. With a special attention to the cultural aspects of the elderly's daily life, the authors present the results of a

practical use of a gesture-based game application on a population of 12 senior people aged 60+.

Last, but not least, this edition closes with the paper entitled "*Generation and Dramatization of Detective Stories*", which deals with the subject of plot composition methods. The authors present a technique that uses Prolog clauses to express the conventions of a specific game genre, together with a user-friendly interface that allows end users to create plots over a pre-defined genre in an interactive way.

As invited authors of this JIS Special Issue, we would like to express our thanks for the editor-in-chief, Alberto Raposo, for the opportunity. We are especially grateful to all reviewers and the authors of the papers.

Have a nice reading with our warmest regards!



Ismar Frango Silveira received his PhD in Electrical Engineering at University of São Paulo (USP), his MSc. degree in Computer Sciences at Technological Institute of Aeronautics (ITA) and his BSc. in Mathematics at Federal University of Juiz de Fora (UFJF), all in

Brazil. Nowadays, he is Professor at Mackenzie Presbyterian University and Cruzeiro do Sul University, both in São Paulo, Brazil, teaching in CS and Digital Games undergraduate courses and MSc. and PhD. programs on Math & Sciences Teaching and Electrical Engineering and Computer Sciences. Currently, he is the national coordinator of Computers in Education Commission of Brazilian Computer Society (SBC). Ismar has been the Program Chair of SBGames 2013 Computer Track. Contact: ismar.silveira@mackenzie.br



Esteban Walter Gonzalez Clua is graduated in Computer Science at Universidade de São Paulo and has master's and PhD degree in Computer Science. Nowadays, Esteban is

Associated professor in the Computer Sciences Institute at Universidade Federal Fluminense, in Rio de Janeiro. Esteban is one of the founders of SBGames, and currently is president of the Brazilian Computing Society Game Committee and member of program committees of many conferences on Games. In 2007 he received a prize as the personality which most contributed for the growth of the videogame industry in Brazil. In 2009 and 2013 he received the prize of Young Scientist of the State of Rio de Janeiro. Esteban is the coordinator of the first Latin America Nvidia Center of Excellence, which is in UFF Medialab. Contact: esteban@ic.uff.br