Abstract

Foreword to Special Section on EPCGI'16, containing the extended best paper.

Graphical abstract



The Portuguese Meeting of Computer Graphics and Interaction, which regularly brings together researchers and professionals from these areas in Portugal is an interdisciplinary event, mirror of a vibrant and multifaceted community. Having for most of its existence been called Portuguese Meeting of Computer Graphics, it joined from 2015 with its sister conference, Interaction, giving origin to the EPCGI. From then on, it became a forum for the presentation and discussion of the most varied themes, ranging from Virtual and Augmented Reality, to User-Centered Design, to Modeling, Rendering, Accessibility, Human-Robot Interaction and Digital Art.

This special section of Computers & Graphics contains an extended version of one of the best papers of the Portuguese Meeting of Computer Graphics and Interaction (EPCGI 2016) held in Covilhã, at the University of Beira Interior in Portugal, in 2016, supported by the Portuguese Computer Graphics Group, the national Eurographics Chapter. All the submitted papers went through double-blind process by at least three reviewers of the 50 International Program Committee (IPC). From all accepted manuscripts papers two were considered for the special section and one was accepted. The paper selection was based on the comments and ratings provided by the reviewers, the oral presentation, and the work of the conference's Best Paper Award committee.

The work by Melo et al. [1], studies different factors that can contribute to a better user experience in virtual reality applications when using headmounted displays, namely exposure time, content type, and gender. This study evaluates the impact of these variables on users' Sense of Presence and Cybersickness regarding 360° content. As a conclusion, authors argue synthesized environments are more effective for a female audience and that for non-interactive environments, captured environments are more effective than synthesized environments. Lastly, authors say that exposure time is not a concern for experiences lasting between 1 and 7 minutes.

We would like to express our sincere appreciation to the conference organizers, IPC members as well as to the external reviewers for their extremely efficient work in reviewing all these papers in a relative short time. Many thanks go to the authors who have submitted their work. We are grateful, in particular, to Prof. J. Jorge and all of the C&G journal staff for facilitating the publication of this special section.

References

[1] Miguel Melo, José Vasconcelos-Raposo, Maximino Bessa, Presence and cybersickness in immersive content: Effects of content type, exposure time and gender, Computers & Graphics, Available online 5 December 2017, ISSN 0097-8493, <u>https://doi.org/10.1016/j.cag.2017.11.007</u>.



Daniel Gonçalves is a researcher at the Visualization and Multimodal Interfaces Group of INESC-ID and Professor of Computer Science at Instituto Superior Técnico (IST/UL), the School of Engineering of the University of Lisboa, Portugal. His research encompasses the areas of Information Visualization, Personal Information Management, Gamification and Accessibility. He has published over 160 peer-reviewed papers publications in those areas, as well as being the co-author of a textbook on Human-Computer Interaction. He managed INESC-ID's participation in the national EDUCARE project, where information visualization techniques will be used in novel ways as a pedagogic aid, and EU AAL PAELife, striving to find new interaction techniques for the creation of a personal life assistant for the elderly. He was one of the organizers and Technical Program Chair of IFIP INTERACT 2011 (September 2011) and of the ACM International Conference on Intelligent User Interfaces (February 2012). Since 2015 he is part of the Editorial Board of the Universal Access to the Information Society journal. He is a member of ACM and the Portuguese Computer Graphics Group (the national Eurographics chapter), of which he is a member of the board of directors.



Maximino Bessa is Assistant Professor with Habilitation of the Department of Engineering of the University of Trás-os-Montes and Alto Douro, Portugal, Senior Researcher of INESC TEC since 2009 and Director of the Multisensory Virtual Reality Laboratory MASSIVE where more than 15 researchers participate. He's Member of the Eurographics Association since 2003 and Vice-President of the Portuguese Computer Graphics Group for the period 2016-2018.

Graduated in Electrical and Computer Engineering in 2003 from the University of Trás-os-Montes e Alto Douro, he completed his PhD in Engineering Sciences (Computer Graphics) at the same institution in 2007. He obtained the degree of Habilitation in Computer Science in 2017 at the University of Trás-os-Montes e Alto Douro. He is co-author of more than 70 research articles (of which more than 20 in international reference journals), books and book chapters. He has participated in several research projects, including the COST ACTION IC1005 project - The digital capture, storage, transmission and display of real-world lighting (HDRi) and the MASSIVE Project - Multimodal Acknowledgeable multiSenSorial Immersive Virtual Environments. His main research interests are: Multisensory Virtual Environments, Computer Graphics, HDR, Human Computer Interaction, Virtual and Augmented Reality.