## Guest Editorial Foreword to the Special Issue of IHC 2015

This special issue of Journal on Interactive Systems is dedicated to Human-Computer Interaction. It contains a selection of five of the best full papers presented at the 14th Brazilian Symposium on Human Factors in Computing Systems (IHC'15), held in Salvador, Bahia, between 3rd and 6th November 2015. The event was promoted by the Brazilian Computer Society (SBC), through the Special Committee on Human-Computer Interaction (CEIHC).

IHC 2015 discussed the theme "Multicultural Interaction and HCI" with concern in the design and evaluation of the interactive presentation focused on intercultural approaches to interaction. Multiculturalism be a reflective mediation of the diverse influences that distinct cultures will always have on society and on the computer mediated interaction. One of the major challenges for the Human-Computer Interaction (HCI) area is that we have started to "live with technology" ubiquitously and deal with cultural diversity present in a world of interaction without clear boundaries because the world has become increasingly globalized. Amongst several aspects, there is a need to discuss and investigate solutions that help HCI professionals to understand and balance cultural accessibility issues. The users of one culture can then make use of solutions designed by other cultures, preserving cultural diversity. Moreover, the technology produced should respect cultural identity, characteristics and values. It is necessary to understand how the designer's intercultural communication model is perceived by users and how it is evaluated so that it makes sense to stakeholders.

Thus, some papers of this special issue present interesting discussions around these themes. As extended versions of the original conference papers, these works present original content or new contributions when compared to their previous versions and underwent a whole new and independent review process.

"An Essay on Human Values in HCI" presents an informed discussion that explore possible understandings for values in HCI, the importance of the topic, and existing approaches developing critical discussions and suggest possible directions for advancing the research and practice in the context of this challenge. "Specification and Usability Evaluation of an Attention-aware Remote Control designed in a Physical Prototype" defines requirements for entering text in interactive digital TV, based on theories of shared attention, to make a prototype of a remote control which enables more natural user interaction. The physical prototype of this newly created device features movement recognition and sensory feedback as modalities of interaction. In usability tests, data on users' performance and satisfaction was collected, as well as data on their attention and relaxation captured through an

Electroencephalogram device. "Constructing meanings for formal use of mobile communication applications in educational contexts" investigates the potential of mobile communication applications to promote interaction in formal communication processes, and based on an Organizational Semiotic analysis, proposes and evaluates a system to enable students to perform preparatory pre-class activities with WhatsApp exchanging commands, text and multimedia "Computational Thinking Tools: Analyzing messages. concurrency and its representations" focuses on how concurrency is dealt with by five well-known Computational thinking tools: Scratch, Alice, AgentSheets, NetLogo and Greenfoot presenting the results of a systematic analysis contrasting their model of concurrent behavior with the corresponding metamessages, the messages about messages of concurrency, that trigger users' interpretation and learning of concurrency-related concepts, and indicating opportunities for an explicit exploration of how some concurrency aspects are implemented in games and simulations built with tools in this domain. "An exploratory study on prejudice based on gender identity or sexual orientation perceived by users in social networks" investigates whether digital systems user interfaces reproduce or not oppressions based on gender identity or sexual orientation.

We hope you enjoy the selection of papers in this special issue and that they encourage you to address HCI issues in your own work.

## ACKNOWLEDGMENTS

The guest editors of this JIS Special Issue would like to thank the reviewers for their invaluable collaboration and informative reviews, as well as the authors, whose contributions were fundamental to the quality of the papers. Finally, we sincerely thank the JIS Editor-in-Chief, Alberto Raposo, for his support during the best papers review process.



Andreia Libório Sampaio is Professor of Computer Science at the Federal University of Ceará (UFC), where is vice principal and coordinator of academic programs. She teaches and advises in the field of Human-Computer Interaction (HCI). Her research areas include: HCI, Artificial Intelligence,

Software Engineering, Semiotic Engineering and End User

Development. Her professional experience includes several years (from 1997 to 2010) as programmer and systems development coordinator. She has PhD in Informatics by Pontifical Catholic University of Rio de Janeiro (PUC-Rio, 2010). e-mail: andreia.ufc@gmail.com



**Clodis Boscarioli** is a senior lecturer at the Western Paraná State University (UNIOESTE) where he teaches in the undergraduate course in Computer Science and as a permanent teacher and adviser in the Master's Courses in Teaching and in Technologies, Management and Sustainability. He is

graduated in Informatics by Ponta Grossa University (UEPG, 1996) and has master's degree in Informatics by Paraná Federal University (UFPR, 2002) and has doctor degree in Electric Engineering by São Paulo University (USP, 2008). His research areas include: Information Systems, Database Systems, HCI, Computational Learning, Data Mining, Assistive Technologies for Teaching & Learning Processes, and Computing Education. e-mail: boscarioli@gmail.com or clodis.boscarioli@unioeste.br