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EDITORIAL

Forward to the theme issue on interactive experiences for television and online video

Marianna Obrist[1] · Pablo Cesar[2] · Santosh Basapur[3]

The last few years have seen a substantial change on the way media is produced, distributed, and consumed. Within this theme issue on 'interactive experiences for television and online video' we revisit some of the most pressing topics in this fascinating research area, which is increasingly interesting to an international community of academics and industrial practitioners. This area engages a wide range of disciplines, from human–computer interaction, multimedia engineering and design to media studies, to media psychology and sociology. The multi-disciplinary community comes together at the annual ACM International Conference on Interactive Experiences for Television and Online Video (ACM TVX) to discuss the most relevant topics, such as novel interaction techniques, multi-device systems, media environments, and insights into viewers' experiences based on the analysis of large-scale datasets containing user feedback and behaviour.

Within this special issue you will not only be inspired by novel insights into the proliferation of multiple devices for enabling multi-user and multi-screen experiences, but you will be taken on a journey far beyond devices, platforms, and content. Beyond the traditional remote control and voice interaction, researchers are deepening our understanding about gesture languages for interacting with TV media or viewers' behaviour towards browsing and searching for content. At the same time, content producers'

✉ Marianna Obrist
  m.obrist@sussex.ac.uk

[1] University of Sussex, Brighton, UK

[2] CWI, Amsterdam, The Netherlands

[3] Institute of Design, IIT, Chicago, IL, USA

accessibility needs are also being investigated with equal enthusiasm.

The first paper, by Mark Mcgill, John Williamson and Stephen Brewster from the University of Glasgow, UK, describes how TV usage has been transformed due to the proliferation of multiple devices, allowing for multi-screen experiences. The authors provide insights about the relationship between private and shared viewing experiences and the role of emerging technologies in this evolution of TV consumption. The second paper, by Jeroen Vanattenhoven and David Geerts, from KU Leuven, Belgium, deepens current knowledge about multi-screen experiences through additional studies that take into account the context: time, mood, the content and viewer as well as the delivery form and viewing mode. The multi-use and multi-screen experiences and their implications for producing and delivering TV and video content, especially for recommender systems, are revealed and discussed in these two papers.

The focus on multi-screens is also present in the third paper, by Radu-Daniel Vatavu and Matei Mancas, University Stefan cel Mare of Suceava, Romania. However, this paper focuses on experiences that make use of multiple TVs at the same time, beyond current practices that involve mobile phones and tablets. The authors evaluate and measure the visual attention of the viewers in such complex environments. Based on the findings presented in this paper, eight (objective) measures that characterise the viewers' visual attention in a multi-screen TV setting can be automatically computed. The authors also provide a toolkit that allows other researchers to use these newly established measures.

The fourth paper, by Mikel Zorrilla et al., Vicomtech-IK4, Spain, provides a more pragmatic industry perspective about multi-device consumption environments. The

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authors propose a distributed architecture for the provision of adaptive multi-device applications using standardised web technologies. Their solution allows users to interact seamless across devices.

Moving from the more presentation aspect to the interaction mechanisms, the fifth paper, by Ionut-Alexandru Zaiti et al., University Stefan cel Mare of Suceava, Romania, provides more insights into our understanding of fine-resolution gestures for interacting with the TV. Gesture interaction is an exciting field for exploring remote-free lean-back TV interactive experiences. This paper provides an overview of 378 user-defined gesture dataset, including details about the recorded position, direction and velocity coordinates of the hand and fingers.

The sixth paper, by Amela Karahasanovic and Jan Heim, SINTEF, Norway, advances the discussion on TV consumption and users' behaviours. In particular, it looks at how people search for TV content online. Based on their study, they reflect about the different strategies people apply to search for content. The exploration is based on how people search and what they tell (combined qualitative and quantitative data). These findings contribute and advance previous work for the prediction of search behaviour, and they can be used for designing more personalised search interfaces.

Last but not least, the seventh paper, by Reuben Kirkham et al., Newcastle University, UK, jointly with BBC, UK, has an important message to convey on how to enable people with disabilities to still be involved in the TV production process. The different roles and activities for TV content production are presented and discussed, along with legal regulations about accessibility and their implications. This paper thus completes the cycle from consumption to production and the other way around, giving novel and relevant insights in relation to the technology, interaction, and user behaviour.

We would like to express our thanks to the Editor-in-Chief, Peter Thomas, for supporting us in our role as guest editors of this special issue. We would also like to thank the reviewers for their help and insightful comments. We are extremely grateful to the authors for their contributions and willingness to participate in the laborious process of preparing this issue.