

## Workshop Proposal for ICEC 2013

### The new ecology of entertainment devices: first, second and multiple screens in the home setting.

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## 1 Workshop Topics

The development of digital television, the ubiquity of mobile phones and most recently the spread of digital tablets have together led to users engaging with combinations of devices that were only vaguely perceived a few years ago. Sometimes we will be doing quite different things on each device: we browse, text, Tweet and Skype while consuming TV or use the TV for background as we play a game on a laptop. Sometimes our activities are more tightly connected: we tweet about a TV programme, or look up a TV news programme to follow up a friend's text. Most recently, a new genre of system has been developed to provide a user experience even more closely "tethered" to the broadcast TV programme, with companion applications supporting shows via play-along quizzes, games and educational activities, often in synchronous mode.

These new developments in juggling with multiple devices prompt on the one hand fascinating questions for observers of user behaviour and on the other challenges for designers of these experiences. In this workshop we aim to bring together researchers interested in cognitive, social and cultural aspects of multi-device user experience and designers and developers of second screen experiences, in a mutually informative conversation.

The range of topics of interest to the workshop includes, but is not restricted to:

- Cognitive issues in interacting with multiple screens: usability, perception, attention, accessibility
- Sociability and second screens, including social networking activity
- Observational user studies in homes and on the move
- Casual use of handheld devices in the TV context: the lessons for second screen design
- Personal devices as remote controls
- The design space for potential companion and second screen experiences
- Second screens in different application areas: games, entertainment, news, documentary, edutainment
- Standards, guidelines and patterns for second screens
- Production routes and authoring methods for multi-screen applications
- Examples of second screen deployment, successful or not
- Design guidelines for companion applications

## **2 Process**

The workshop will be publicised via a web site and announcements on a wide range of fora, with a call for papers for presentation at the workshop. The morning of the workshop will be devoted to presentations, with the afternoon session given over to small group and whole group creative discussions. The emphasis will be on exchanging information and experiences, creating productive links to support future collaborations. The purpose of workshop is basically twofold. On the one hand we aim to provide a knowledge exchange opportunity for participants, in the form of short presentations of papers, which we will seek to publish in a relevant journal, together with an introduction detailing the workshop process and its other outputs. We also aim to create a relatively informal setting where participants have the opportunity to work actively together in an atmosphere that fosters the creative thinking. In order to encourage this, the output of the workshop will be a set of scenarios to capture the discussion and point to potential future systems. The scenarios will ideally be presented via a poster in the conference poster session.

## **3 Organisers**

The three organisers have many years' experience in the field of interactive television and of interactive technologies more broadly and are all experienced in conference and workshop organisation.

Dr Lyn Pemberton is Reader in Human Computer Interaction at the University of Brighton, where she is head of the Computing Division. One of the founders of the well-established EuroITV Conference, she has been involved in research on user-

related aspects of interactive television for more than ten years, mostly concentrating on edutainment, learning technologies, cross-platform interaction design, usability evaluation and recommender systems for iTV. She has designed and managed a number of projects funded by national and European agencies including JISC, the (UK) Technology Strategy Board and EU Lifelong Learning projects, focussing on mobile and cross-platform development for language learning and cultural heritage. Most recently she has worked on the technology acceptance aspects of novel technologies.

Dr Sanaz Fallahkhair is a Senior Lecturer and Course Leader MSc Information Systems at the School of Computing, University of Portsmouth, UK. Her research interests are in the areas of human-centred design of new technologies that incorporate studies of user experiences, cognition and collaboration in designing novel interactive systems delivered via multiple platform: PC, mobile and Interactive Television. She is particularly interested in the applications of mobile and ubiquitous systems in education and healthcare domains. Currently she is a member of HCI and Pervasive Computing Research Group at the University of Portsmouth, and an Honorary Visiting Research fellow of the Interactive Technologies Research Group at the University of Brighton. She has worked on a range of research projects funded by EU, JISC and UK Department of Health, such as the FP6-EU and JISC funded projects, including TAMALLE (Television and Mobile phone Assisted Language Learning Environment), LOGOS (Knowledge on-demand for Ubiquitous learning) and CloudBank (Mobile Knowledge Sharing for Advanced Language Learners). She has written widely on the subject of user centred design and development of mobile, ubiquitous and cross platform applications.

Dr Roseli de Deus Lopes is Associate Professor in the Electronic Systems Engineering Department, Escola Politécnica, Universidade de São Paulo (EP-USP). She received her undergraduate, master, doctorate and post-doctorate degrees in Electrical Engineering from EP-USP. She is the vice-chair of the Instrumentation Center of Interactive Technologies (CITI-USP) and is a principal investigator at Laboratório de Sistemas Integráveis (LSI-EP-USP), where she coordinates research projects in Interactive Electronic Media (which includes research in computer graphics, digital image processing, HCI, virtual reality and augmented reality) with emphasis on applications related to Education and Health. She also coordinates scientific dissemination initiatives and projects aimed at identifying and developing talents in Science and Engineering. Since 2003, she acts as the general coordinator of FEBRACE (Brazilian Fair of Science and Engineering), the biggest national pre-college S&E fair in Brazil. She is the current academic coordinator of the “USP and Careers” program. She is a member of the Ministry of Education Working Group of the program of One Computer per Student (UCA - um computador por aluno). She was vice-chair (2006-2008) and director (2008-2009) of Estação Ciência, a Center for Scientific, Technological and Cultural Dissemination of USP, and currently is a member of the deliberative council of the USP Science Museum.

An international programme committee will be set up if the workshop proposal is accepted.