HCI 2014 - Sand, Sea & Sky - Holiday HCI

Human Computer Interaction

Proceedings of the 28th International BCS Human Computer
Interaction Conference (HCI 2014)

Southport, UK

9 - 12 September 2014

Editors:

Dr Daniel Fitton

Dr Matt Horton

Professor Janet C Read

Dr Gavin Sim

Abstract

The 28th International BCS Human Computer Interaction Conference was organised by the ChiCI group within the School of Computing, Engineering and Physical Sciences at the University of Central Lancashire in Preston in conjunction with BCS, The Chartered Institute for IT. The conference was held at the Royal Clifton Hotel on the Promenade in Southport from the 9 September to 12 September.

The conference theme was 'Sun, sea and sky - holiday HCI', taking inspiration from the location of the event in a seaside holiday town and recognising the need for computer systems to support leisure and family life. Papers were presented on topics such as: design methods, sustainability, HCI and education, social media, games design, mobile design, health, HCI in the work place and innovative interaction styles.

Full Synopsis

HCI 2014 - Sand, Sea & Sky - Holiday HCI

Proceedings of the 28th International BCS Human Computer Interaction Conference (HCI 2014)

Southport, UK, 9 - 12 September 2014

The 28th International BCS Human Computer Interaction Conference was organised by the ChiCI group within the School of Computing, Engineering and Physical Sciences at the University of Central Lancashire in Preston in conjunction with BCS, The Chartered Institute for IT. The conference was held at the Royal Clifton Hotel on the Promenade in Southport from the 9 September to 12 September.

The conference theme was 'Sun, sea and sky - holiday HCI', taking inspiration from the location of the event in a seaside holiday town and recognising the need for computer systems to support leisure and family life. Papers were presented on topics such as: design methods, sustainability, HCI and education, social media, games design, mobile design, health, HCI in the work place and innovative interaction styles.

The lively conference included activities intended to drive discussion, such as a forum on HCI that took place as a walk down a pier, a special session on health and HCI and a conference meal overlooking the marine lake. Delegates were able to take exercise along the sea front and enjoy the Victorian shopping arcades and local food.

The academic work presented at the conference is compiled in these proceedings which represent the hard work of a large set of reviewers, the chairs of the tracks and the authors who contributed. So we would like to take this opportunity to thank everyone for all their hard work in making HCI 2014 a very successful and enjoyable conference.

All the best,

Janet Read, Matt Horton, Gavin Sim and Dan Fitton, Proceedings Editors

Editors

Dr Daniel Fitton is a senior lecturer in interaction design and research degrees tutor at the University of Central Lancashire. He has published widely and worked on numerous research projects and collaborations with industrial partners. He takes a user-centred and participatory approach to solving real-world problems, using novel and away-from-the-desktop technologies. He is particularly interested in understanding and designing with teenaged technology users. He was recently an investigator on a large interdisciplinary research project working with teenagers to develop technologies to reduce energy use. He is currently serving as publicity chair for the BCS Interactions specialist group.

Dr Matt Horton is a lecturer in the School of Computing, Engineering & Physical Sciences at the University of Central Lancashire, Preston. He is a member of the Child Computer Interaction (ChiCI) Group and secretary of the TC13 IFIP Working Group on Interaction Design & Children. Matt's main research area lies in participatory and user-centred design and evaluation with children. He has over 50 publications in the fields of CCI and HCI and was co-founder of the International Fun 'n Games Conference that has now been incorporated into CHIPlay.

Professor Janet C Read is a professor of child computer interaction at the University of Central Lancashire. She is a leading international researcher in child computer interaction (ChiCI) and is the chair of the International IFIP SIG on ChiCI as well as being the author of one of the best-selling textbooks in this field. Her most cited work is in regard to evaluating fun in interactive technologies with children. Recent work has been studying cool as it applies to the design of technologies for teenagers and the ethics around the use of participatory design and participatory research with children.

Dr Gavin Sim is a senior lecturer in the School of Computing, Engineering & Physical Sciences at the University of Central Lancashire, Preston. He is secretary to the BCS Interaction specialist group and his research interests are in the area of HCI and educational technology. He is an active researcher within the Child Computer Interaction (ChiCI) group, where his focus has been on evaluating user experience and usability within games and educational technology. He reviews for the major HCI conferences and journals and has over 50 peer reviewed publications in this area.

Papers:

Full Papers

Christian Brel, Phillippe Renevier Gonin, Alain Giboin, Michel Riveill & Anne-Marie Dery Reusing and Combining UI, Task and Software Component Models to Compose New Applications
<http://dx.doi.org/10.14236/ewic/HCI2014.1>

Suranjith De Silva, Michael Barlow & Adam Easton An Evaluation of DTW Approaches for Whole-of-Body Gesture Recognition
<http://dx.doi.org/10.14236/ewic/HCI2014.2>

Alice Marlene Gross & Juliane Bürglen The Impact of Expectations on User Experience: Surprising the User
<http://dx.doi.org/10.14236/ewic/HCI2014.3>

Lilit Hakobyan, Jo Lumsden & Dymna O'Sullivan Participatory Research with Older Adults with AMD: Co-Designing a SMART Diet Diary App
<http://dx.doi.org/10.14236/ewic/HCI2014.4>

Dave Harley, Kate Howland, Eric Harris & Cara Redlich Online communities for older users: what can we learn from local community interactions to create social sites that work for older people
<http://dx.doi.org/10.14236/ewic/HCI2014.5>

Christian M Jones, Laura Scholes, Daniel Johnson, Mary Katsikitis & Michelle C Carras Videogames: Dispelling myths and tabloid headlines that videogames are bad
<http://dx.doi.org/10.14236/ewic/HCI2014.6>

Divesh Lala, Toyoaki Nishida & Yasser Mohammad A Joint Activity Theory Analysis of Body Interactions in Multiplayer Virtual Basketball
<http://dx.doi.org/10.14236/ewic/HCI2014.7>

Catherine Letondal, Pierre-Yves Pillain, Emile Verdurand, Daniel Prun & Olivier Grisvard Of Models, Rationales and Prototypes: Studying Designer Needs in an Airborne Maritime Surveillance Drawing Tool to Support Audio Communication
<http://dx.doi.org/10.14236/ewic/HCI2014.8>

Tom McEwan, Nseabasi Igoniderigha & David Benyon Designing Coordinated Multiple Views of Information Space
<http://dx.doi.org/10.14236/ewic/HCI2014.9>

Brian O'Keefe, David Benyon, Gaurav Chandwani, Madhav Menon & Randy Duke II A Blended Space for Heritage Storytelling
<http://dx.doi.org/10.14236/ewic/HCI2014.10>

Dina Salah, Richard Paige & Paul Cairns A Practitioner Perspective on Integrating Agile and User Centred Design
<http://dx.doi.org/10.14236/ewic/HCI2014.11>

Martin Schmettow, Cedric Bach & Dominique Scapin Optimizing Usability Studies by Complementary Evaluation Methods
<http://dx.doi.org/10.14236/ewic/HCI2014.12>

Dara Sherwani & Simone Stumpf Toward Helping Users in Assessing the Trustworthiness of User-

Generated Reviews <http://dx.doi.org/10.14236/ewic/HCI2014.13>

Katryna Starks, Christian Jones & Mary Katsikitis GameChange(H)er: How Nancy Drew Video Games Build Strong Girls <http://dx.doi.org/10.14236/ewic/HCI2014.14>

Jakob Tholander Using Body Cards in a Design Process for Going From Bodily Experiences to Design <http://dx.doi.org/10.14236/ewic/HCI2014.15>

Mark Whooley, Bernd Ploderer & Kathleen Gray On the Integration of Self-tracking Data amongst Quantified Self Members <http://dx.doi.org/10.14236/ewic/HCI2014.16>

Neil Winterburn, Peggy Gregory & Dan Fitton Designing Teenage Emotions with a Life of Their Own <http://dx.doi.org/10.14236/ewic/HCI2014.17>

Short papers

Johan Blomkvist & Mattias Arvola Pausing or Not? Examining the Service Walkthrough Technique <http://dx.doi.org/10.14236/ewic/HCI2014.18>

Aurora Constantin, Helen Pain & Annalu Waller Using Grounded Theory Methods to Inform the Design of an Authoring Tool <http://dx.doi.org/10.14236/ewic/HCI2014.19>

Ricardo Dias, Joana Pinto & Manuel J Fonseca Interactive Visualization for Music Rediscovery and Serendipity <http://dx.doi.org/10.14236/ewic/HCI2014.20>

Shamal Faily, John Lyle, Ivan Fléchais, Andrea Atzeni, Cesare Cameroni, Hans Myrhaug, Ayşe Göker & Robert Kleinfeld Authorisation in Context: Incorporating Context-Sensitivity into an Access Control Framework <http://dx.doi.org/10.14236/ewic/HCI2014.21>

Nádia Fernandes, André Rodrigues, Carlos Duarte, Raquel Hijón-Neira & Luís Carriço Web Accessibility of Mobile and Desktop Representations <http://dx.doi.org/10.14236/ewic/HCI2014.22>

Daniel Fitton & Beth Bell Working with Teenagers within HCI Research: Understanding Teen-Computer Interaction <http://dx.doi.org/10.14236/ewic/HCI2014.23>

Tiago Gonçalves, Ana Paula Afonso & Bruno Martins Visualizing Human Trajectories: Comparing Space-Time Cubes and Static Maps <http://dx.doi.org/10.14236/ewic/HCI2014.24>

Oussama Metatla, Fiore Martin, Tony Stockman & Nick Bryan-Kinns Non-Visual Menu Navigation: the Effect of an Audio-Tactile Display <http://dx.doi.org/10.14236/ewic/HCI2014.25>

Kensho Miyoshi, Ryo Konomura & Koichi Hori Entertainment Multi-rotor Robot that Realises Direct and Multimodal Interaction <http://dx.doi.org/10.14236/ewic/HCI2014.26>

Steven Neale, Winyu Chinthammit, Christopher Lueg & Paddy Nixon Facilitating Learning Through Hands-on Engagement With Virtual Museum Artefacts <http://dx.doi.org/10.14236/ewic/HCI2014.27>

Anne-Marie Oostveen Non-use of Automated Border Control Systems: Identifying Reasons and

Solutions <http://dx.doi.org/10.14236/ewic/HCI2014.28>

Martin Schmettow & Matthias Drees What Drives the Geeks? Linking Computer Enthusiasm to Achievement Goals <http://dx.doi.org/10.14236/ewic/HCI2014.29>

Harri Siirtola Bars, Pies, Doughnuts & Tables - Visualization of Proportions
<http://dx.doi.org/10.14236/ewic/HCI2014.30>

Huawei Tu, Patrick Oladimeji, Yunqiu Li, Harold Thimbleby & Chris Vincent The Effects of Number-related Factors on Entry Performance <http://dx.doi.org/10.14236/ewic/HCI2014.31>

Katie Wilkie, Simon Holland & Paul Mulholland Eliciting Domain Knowledge Using Conceptual Metaphors to Inform Interaction Design: A Case Study from Music Interaction
<http://dx.doi.org/10.14236/ewic/HCI2014.32>

Sam Zargham & Janko Čalić Dynamic Presentation of Synchronised Photo Streams
<http://dx.doi.org/10.14236/ewic/HCI2014.33>

Work in progress papers

Muna M Alhammad & Stephen R Gulliver Online Persuasion for E-Commerce Websites
<http://dx.doi.org/10.14236/ewic/HCI2014.34>

Andra Balta & Janet C Read Colour Preference in Teenage Boys' Bedrooms
<http://dx.doi.org/10.14236/ewic/HCI2014.35>

Chris P Bowers, Benjamin R Cowan, Chris Creed & Gido Hakvoort Challenges of using Stereoscopic Displays in a Touch Interaction Context <http://dx.doi.org/10.14236/ewic/HCI2014.36>

Harry Brenton, Matthew Yee-King, Andreu Grimalt-Reynés, Marco Gilles, Maria Krivenski & Mark d'Inverno A Social Timeline for Exchanging Feedback about Musical Performances
<http://dx.doi.org/10.14236/ewic/HCI2014.37>

Kovila P L Coopamootoo & Thomas Groß Mental Models of Online Privacy: Structural Properties with Cognitive Maps <http://dx.doi.org/10.14236/ewic/HCI2014.38>

Nicky Danino & Gavin Sim TReACLE: a Framework for Twitter Analysis in a Social and Learning Environment <http://dx.doi.org/10.14236/ewic/HCI2014.39>

Mark Davies, Alan Chamberlain, Harold Thimbleby & Paul Lee Managing Gravity Infusion using a Mobile Application <http://dx.doi.org/10.14236/ewic/HCI2014.40>

Luís Duarte, Paulo Ribeiro, André Rodrigues, Tiago Guerreiro & Luís Carriço A Preliminary Assessment of Physical & Virtual Presence in Exergames
<http://dx.doi.org/10.14236/ewic/HCI2014.41>

Paul Golz & Alex Shaw Augmenting Live Performance Dance Through Mobile Technology
<http://dx.doi.org/10.14236/ewic/HCI2014.42>

Shah Rukh Humayoun, Steffen Hess, Felix Kiefer & Achim Ebert Patterns for Designing Scalable Mobile App User Interfaces for Multiple Platforms <http://dx.doi.org/10.14236/ewic/HCI2014.43>

Nan Jiang & Huseyin Dogan CrowdHiLite: A Peer Review Service to Support Serious Reading on the Screen <http://dx.doi.org/10.14236/ewic/HCI2014.44>

Ana Jorge, Sérgio Serra & Teresa Chambel Interactive Visualizations of Video Tours in Space and Time <http://dx.doi.org/10.14236/ewic/HCI2014.45>

Mark Reilly, Haifeng Shen, Paul Calder & Henry Duh Towards a Collaborative Classroom through Shared Workspaces on Mobile Devices <http://dx.doi.org/10.14236/ewic/HCI2014.46>

André Rodrigues & Tiago Guerreiro SWAT: Mobile System-Wide Assistive Technologies <http://dx.doi.org/10.14236/ewic/HCI2014.47>

Sérgio Serra, Ana Jorge & Teresa Chambel Multimodal Access to Georeferenced Mobile Video through Shape, Speed and Time <http://dx.doi.org/10.14236/ewic/HCI2014.48>

Obelema Akobo Wodike, Gavin Sim & Matthew Horton Empowering Teenagers to Perform a Heuristic Evaluation of a Game <http://dx.doi.org/10.14236/ewic/HCI2014.49>

AltHCI Papers

John Hutchinson, Nick Race & Mark Rouncefield Having Fun With Evaluation <http://dx.doi.org/10.14236/ewic/HCI2014.50>

Stefano Padilla, Thomas S Methven & Mike J Chantler Is British HCI Important? A Topic-based Comparison with CHI <http://dx.doi.org/10.14236/ewic/HCI2014.51>

Janet C Read & Gavin Sim Taking the Biscuit - Playful Interaction <http://dx.doi.org/10.14236/ewic/HCI2014.52>

Posters

Reem Al Ashaikh, Stephanie Wilson & Sara Jones Exploring Awareness Behaviours and Collaboration Activities in Learning Groups <http://dx.doi.org/10.14236/ewic/HCI2014.53>

Fahad Almansour & Liz Stuart Promoting the use of Design Evaluation Techniques within Software Development <http://dx.doi.org/10.14236/ewic/HCI2014.54>

Daniel Costa, Ricardo Dias & Carlos Duarte A Comparison of the Accessibility of Web Applications in TV and Desktop <http://dx.doi.org/10.14236/ewic/HCI2014.55>

Shah Rukh Humayoun, Ragaad AlTarawneh & Yael Dubinsky Formalizing User Interaction

Requirements of Mobile Applications <http://dx.doi.org/10.14236/ewic/HCI2014.56>

André Justo, Luís Duarte, André Rodrigues & Luís Carriço Integrating Sensors in a Mobile
Application Authoring Environment <http://dx.doi.org/10.14236/ewic/HCI2014.57>