The International Conference on Human-Centered Software Engineering (HCSE) is a single-track working conference which aims at bringing together researchers and practitioners interested in strengthening the scientific foundations of user interface design, examining the relationship between software engineering and human–computer interaction and on how to strengthen user-centered design as an essential part of the software engineering process.

HCSE 2012 was the fourth edition of a series of conferences promoted by the IFIP Working Group 13.2 on WG 13.2 Methodologies for User-Centered Systems Design. Traditionally, this conference is organized in conjunction with other conferences in the field of human-computer interaction. The first edition (HCSE 2007) was organized in Salamanca, Spain, in conjunction with the conference Engineering Interactive Systems (EIS). The second edition (HCSE 2008) was held in Pisa, Italy, with the conference Task Models and Diagrams (TAMODIA). The third edition (HCSE 2010) was organized in Reykjavik, Iceland, in conjunction with NordiCHI. For the first time, HCSE was organized as a standalone conference this year. The 2012 edition of HCSE was held in Toulouse, France, October 29–31 2012, at the Institute of Research of Informatics (IRIT), on the campus of the Paul Sabatier University (Toulouse III).

HCSE 2012 welcomed 12 full research papers (acceptance rate of 22%) and 14 short papers (acceptance rate of 33%) that are presented hereafter. This year, we improved the reviewing process by moving to two rounds of reviews. All contributions were first screened by the members of the international committee and received a set of suggestions for improving the submissions and a recommendation of likely accept/reject. Authors of contributions that received a recommendation of likely accept were then asked to send a rebuttal and a revised version of their contributions. Then, in a second round of reviews, a meta-reviewer screened the original version of the paper, the revised version, and the authors’ rebuttal. The final decision took into account the way authors addressed the reviewers’ comments, which included the edited paper and the argument in the rebuttal. This two-round review process requested extra work both from the authors and the reviewing committee and we are very thankful for all the efforts made. This procedure aimed to support scientific argumentation and guidance toward excellence in research and we believe that it fulfilled these goals. Our sincere gratitude goes to the members of our Program Committee, who devoted countless hours to ensure the high quality of the HCSE Conference.

We would like to thank Neville A. Stanton and Emilia Mendes, our keynotes, who accepted to give an inspiring speech at HCSE and for providing us with a written record that is also presented in these proceedings. In addition, sincere thanks must be extended to the local organizers, Veronique Debats and Sabine Lartigue, whose logistic support was essential to make this conference possible.
Finally, our thanks go to all the authors who did the scientific work and especially to the presenters who took on the additional task of discussing the results with their peers at HCSE 2012 in Toulouse.

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Table of Contents

Keynotes

Human Factors Engineering as the Methodological Babel Fish: Translating User Needs into Software Design .................................................. 1
   Neville A. Stanton

Improving Software Effort Estimation Using an Expert-Centred Approach ................................................................. 18
   Emilia Mendes

Full Papers

A Compositional Model for Gesture Definition ........................................ 34
   Lucio Davide Spano, Antonio Cisternino, and Fabio Paternò

A Design Process for Exhibiting Design Choices and Trade-Offs in (Potentially) Conflicting User Interface Guidelines .................... 53
   Llúcia Masip, Célia Martinie, Marco Winckler, Philippe Palanque, Toni Granollers, and Marta Oliva

A Development Process for Usable Large Scale Interactive Critical Systems: Application to Satellite Ground Segments ...................... 72
   Célia Martinie, Philippe Palanque, David Navarre, and Eric Barboni

Agile User Experience Development in a Large Software Organization: Good Expertise but Limited Impact .................................. 94
   Kati Kuusinen, Tommi Mikkonen, and Santtu Pakarinen

Can GUI Implementation Markup Languages Be Used for Modelling? ........................................ 112
   Carlos Eduardo Silva and José Creissac Campos

Constraining and Creating Solutions – Reflections on the Analysis of Early Design ......................................................... 130
   Chris Roast

Smartphone Applications Usability Evaluation: A Hybrid Model and Its Implementation .......................................................... 146
   Artur H. Kronbauer, Celso A.S. Santos, and Vaninha Vieira

Methods towards API Usability: A Structural Analysis of Usability Problem Categories ......................................................... 164
   Thomas Grill, Ondrej Polacek, and Manfred Tscheligi
## Table of Contents

**Putting Dementia into Context: A Selective Literature Review of Assistive Applications for Users with Dementia and Their Caregivers**  
Joël Vogt, Kris Luyten, Jan Van den Bergh, Karin Coninx, and Andreas Meier  
181

**Puzzle: A Visual-Based Environment for End User Development in Touch-Based Mobile Phones**  
Jose Danado and Fabio Paternò  
199

**Requirements Sensemaking Using Concept Maps**  
Shamal Faily, John Lyle, Andre Paul, Andrea Atzeni, Dieter Blomme, Heiko Desruelle, and Krishna Bangalore  
217

**Towards Conflict Management in User Interface Composition Driven by Business Needs**  
Anne-Marie Déry-Pinna, Audrey Occello, and Michel Riveill  
233

### Short Papers

**A Model for Assessing Organizational Learning in Software Development Organizations**  
Oumout Chouseinoglou and Semih Bilgen  
251

**A Personality Based Design Approach Using Subgroup Discovery**  
Kay Behrenbruch, Martin Atzmüller, Christoph Evers, Ludger Schmidt, Gerd Stumme, and Kurt Geihs  
259

**Assessing Use Complexity of Software: A Tool for Documentation Designers**  
Brigit van Loggem  
267

**Collecting Users Profiles for Web Applications**  
Amin Rasooli, Peter Forbrig, and Fattaneh Tagivareh  
275

**Creativity Patterns Guide: Support for the Application of Creativity Techniques in Requirements Engineering**  
Elton R. Vieira, Carina Alves, and Leticia Duboc  
283

**Exploring Local Cultural Perspectives in User Interface Development in an Indian Offshoring Context: A View from the UK**  
Malte Ressin, Cecilia Oyugi, José Abdelnour-Nocera, David Lee, and Dharam Panesar  
291

**Improving Support for Visual Task Modelling**  
Fabio Paternò, Carmen Santoro, and Lucio Davide Spano  
299
Integrating Usability Evaluation into Model-Driven Video Game Development .............................................. 307  
Adrian Fernandez, Emilio Insfran, Silvia Abrahão, José Ángel Carsí, and Emanuel Montero

Lessons Learned from Evaluating the Usability of Mobile Spreadsheet Applications ........................................... 315  
Derek Flood, Rachel Harrison, and Claudia Iacob

ProtoTask, New Task Model Simulator ...................................... 323  
Lachaume Thomas, Girard Patrick, Guittet Laurent, and Fousse Allan

The Usage of Usability Techniques in Scrum Projects ................... 331  
Yuan Jia, Marta Kristin Larusdottir, and Åsa Cajander

Usability Reporting with UsabML ........................................... 342  
Johannes Feiner and Keith Andrews

Visualizing Sensor Data: Towards an Experiment and Validation Platform .................................................. 352  
Claudia C. Gutiérrez Rodriguez and Anne-Marie Dery-Pinna

Graphical Controls Based Environment for User Interface Evaluation ........................................ 360  
Selem Charfi, Abdelwaheb Trabelsi, Houcine Ezzedine, and Christophe Kolski

Author Index ................................................................................. 369