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Constantine Stephanidis (Ed.)

Universal Access in Human-Computer Interaction

Design for All and eInclusion

6th International Conference, UAHCI 2011
Held as Part of HCI International 2011
Orlando, FL, USA, July 9-14, 2011
Proceedings, Part I

Volume Editor

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Foreword

The 14th International Conference on Human–Computer Interaction, HCI International 2011, was held in Orlando, Florida, USA, July 9–14, 2011, jointly with the Symposium on Human Interface (Japan) 2011, the 9th International Conference on Engineering Psychology and Cognitive Ergonomics, the 6th International Conference on Universal Access in Human–Computer Interaction, the 4th International Conference on Virtual and Mixed Reality, the 4th International Conference on Internationalization, Design and Global Development, the 4th International Conference on Online Communities and Social Computing, the 6th International Conference on Augmented Cognition, the Third International Conference on Digital Human Modeling, the Second International Conference on Human-Centered Design, and the First International Conference on Design, User Experience, and Usability.

A total of 4,039 individuals from academia, research institutes, industry and governmental agencies from 67 countries submitted contributions, and 1,318 papers that were judged to be of high scientific quality were included in the program. These papers address the latest research and development efforts and highlight the human aspects of design and use of computing systems. The papers accepted for presentation thoroughly cover the entire field of human–computer interaction, addressing major advances in knowledge and effective use of computers in a variety of application areas.

This volume, edited by Constantine Stephanidis, contains papers in the thematic area of universal access in human-computer interaction (UAHCI), addressing the following major topics:

- Design for all methods and tools
- Web accessibility: approaches, methods and tools
- Multimodality, adaptation and personalisation
- eInclusion policy, good practice, legislation and security issues

The remaining volumes of the HCI International 2011 Proceedings are:

- Volume 1, LNCS 6761, Human–Computer Interaction—Design and Development Approaches (Part I), edited by Julie A. Jacko
- Volume 2, LNCS 6762, Human–Computer Interaction—Interaction Techniques and Environments (Part II), edited by Julie A. Jacko
- Volume 3, LNCS 6763, Human–Computer Interaction—Towards Mobile and Intelligent Interaction Environments (Part III), edited by Julie A. Jacko
- Volume 4, LNCS 6764, Human–Computer Interaction—Users and Applications (Part IV), edited by Julie A. Jacko
- Volume 6, LNCS 6766, Universal Access in Human–Computer Interaction—Users Diversity (Part II), edited by Constantine Stephanidis
- Volume 7, LNCS 6767, Universal Access in Human–Computer Interaction—Context Diversity (Part III), edited by Constantine Stephanidis

- Volume 8, LNCS 6768, Universal Access in Human–Computer Interaction—Applications and Services (Part IV), edited by Constantine Stephanidis
- Volume 9, LNCS 6769, Design, User Experience, and Usability—Theory, Methods, Tools and Practice (Part I), edited by Aaron Marcus
- Volume 10, LNCS 6770, Design, User Experience, and Usability—Understanding the User Experience (Part II), edited by Aaron Marcus
- Volume 11, LNCS 6771, Human Interface and the Management of Information—Design and Interaction (Part I), edited by Michael J. Smith and Gavriel Salvendy
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- Volume 21, LNAI 6781, Engineering Psychology and Cognitive Ergonomics, edited by Don Harris
- Volume 22, CCIS 173, HCI International 2011 Posters Proceedings (Part I), edited by Constantine Stephanidis
- Volume 23, CCIS 174, HCI International 2011 Posters Proceedings (Part II), edited by Constantine Stephanidis

I would like to thank the Program Chairs and the members of the Program Boards of all Thematic Areas, listed herein, for their contribution to the highest scientific quality and the overall success of the HCI International 2011 Conference.

In addition to the members of the Program Boards, I also wish to thank the following volunteer external reviewers: Roman Vilimek from Germany, Ramalingam Ponnusamy from India, Si Jung “Jun” Kim from the USA, and Ilia Adami, Iosif Kironomos, Vassilis Kouroumalis, George Margetis, and Stavroula Ntoa from Greece.

This conference would not have been possible without the continuous support and advice of the Conference Scientific Advisor, Gavriel Salvendy, as well as the dedicated work and outstanding efforts of the Communications and Exhibition Chair and Editor of HCI International News, Abbas Moallem.

I would also like to thank for their contribution toward the organization of the HCI International 2011 Conference the members of the Human–Computer Interaction Laboratory of ICS-FORTH, and in particular Margherita Antona, George Paparoulis, Maria Pitsoulaki, Stavroula Ntoa, Maria Bouhli and George Kapnas.

July 2011

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HCI International 2013

The 15th International Conference on Human–Computer Interaction, HCI International 2013, will be held jointly with the affiliated conferences in the summer of 2013. It will cover a broad spectrum of themes related to human–computer interaction (HCI), including theoretical issues, methods, tools, processes and case studies in HCI design, as well as novel interaction techniques, interfaces and applications. The proceedings will be published by Springer. More information about the topics, as well as the venue and dates of the conference, will be announced through the HCI International Conference series website: <http://www.hci-international.org/>

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Table of Contents – Part I

Part I: Design for All Methods and Tools

Visual Mediation Mechanisms for Collaborative Design and Development	3
<i>Carmelo Ardito, Barbara Rita Barricelli, Paolo Buono, Maria Francesca Costabile, Antonio Piccinno, Stefano Valtolina, and Li Zhu</i>	
Design for the Information Society	12
<i>Agata Bonenberg</i>	
Classifying Interaction Methods to Support Intuitive Interaction Devices for Creating User-Centered-Systems	20
<i>Dirk Burkhardt, Matthias Breyer, Christian Glaser, Kawa Nazemi, and Arjan Kuijper</i>	
Evaluation of Video Game Interfaces	30
<i>Joyram Chakraborty and Phillip L. Bligh</i>	
Emergent Design: Bringing the Learner Close to the Experience	36
<i>Joseph Defazio and Kevin Rand</i>	
Eliciting Interaction Requirements for Adaptive Multimodal TV Based Applications.....	42
<i>Carlos Duarte, José Coelho, Pedro Feiteira, David Costa, and Daniel Costa</i>	
Making Task Modeling Suitable for Stakeholder-Driven Workflow Specifications.....	51
<i>Peter Forbrig, Anke Dittmar, Jens Brüning, and Maik Wurdel</i>	
A Method to Solve the Communication Gap between Designers and Users	61
<i>Jeichen Hsieh, Chia-Ching Lin, and Pao-Tai Hsieh</i>	
Teaching the Next Generation of Universal Access Designers: A Case Study	70
<i>Simeon Keates</i>	
Use-State Analysis to Find Domains to Be Re-designed	80
<i>Masami Maekawa and Toshiki Yamaoka</i>	
An Approach Towards Considering Users' Understanding in Product Design.....	90
<i>Anna Mieczkowski, Patrick Langdon, and P. John Clarkson</i>	

Evaluation of Expert Systems: The Application of a Reference Model to the Usability Parameter	100
<i>Paula Miranda, Pedro Isaias, and Manuel Crisóstomo</i>	
Investigating the Relationships between User Capabilities and Product Demands for Older and Disabled Users	110
<i>Umesh Persad, Patrick Langdon, and P. John Clarkson</i>	
Practical Aspects of Running Experiments with Human Participants ...	119
<i>Frank E. Ritter, Jong W. Kim, Jonathan H. Morgan, and Richard A. Carlson</i>	
A Genesis of Thinking in the Evolution of Ancient Philosophy and Modern Software Development.....	129
<i>Stephan H. Sneed</i>	
Understanding the Role of Communication and Hands-On Experience in Work Process Design for All	139
<i>Christian Stary</i>	
Extending Predictive Models of Exploratory Behavior to Broader Populations	149
<i>Shari Trewin, John Richards, Rachel Bellamy, Bonnie E. John, Cal Swart, and David Sloan</i>	
Digitizing Interaction: The Application of Parameter-Oriented Design Methodology to the Teaching/ Learning of Interaction Design	159
<i>Shu-Wen Tzeng</i>	
A Study on an Usability Measurement Based on the Mental Model	168
<i>Yuki Yamada, Keisuke Ishihara, and Toshiki Yamaoka</i>	

Part II: Web Accessibility: Approaches, Methods and Tools

Enabling Accessibility Characteristics in the Web Services Domain	177
<i>Dimitris Giakoumis, Dimitrios Tzovaras, and George Hassapis</i>	
Results from Multi-dimensional Accessibility Assessment	187
<i>Rogério Bandeira, Rui Lopes, and Luís Carriço</i>	
A Harmonised Methodology for the Components of Software Applications Accessibility and Its Evaluation	197
<i>Eleni Chalkia and Evangelos Bekiaris</i>	
An Architecture for Multiple Web Accessibility Evaluation Environments	206
<i>Nádia Fernandes, Rui Lopes, and Luís Carriço</i>	

Overview of 1 st AEGIS Pilot Phase Evaluation Results	215
<i>Maria Gkemou and Evangelos Bekiaris</i>	
An End-User Evaluation Point of View towards OSS Assistive Technology	225
<i>Maria Gkemou, Evangelos Bekiaris, and Karel Van Isacker</i>	
A Method to Automate the Ranking of Web Pages According to User Defined Accessibility Ratings	235
<i>Alice Good</i>	
Issues in Web Presentation for Cognitive Accessibility	244
<i>Clayton Lewis</i>	
A Study of Accessibility Requirements for Media Players on the Web . . .	249
<i>Lourdes Moreno, María Gonzalez, Paloma Martínez, and Ana Iglesias</i>	
An Accessibility Assessment Framework for Improving Designers Experience in Web Applications	258
<i>Theofanis Oikonomou, Nikolaos Kaklanis, Konstantinos Votis, and Dimitrios Tzovaras</i>	
A Unified Environment for Accessing a Suite of Accessibility Evaluation Facilities	267
<i>Nikolaos Partarakis, Constantina Doulgeraki, Margherita Antona, Theofanis Oikonomou, Nikolaos Kaklanis, Konstantinos Votis, Grammati-Eirini Kastori, and Dimitrios Tzovaras</i>	
Introducing TactoWeb: A Tool to Spatially Explore Web Pages for Users with Visual Impairment	276
<i>Grégory Petit, Aude Dufresne, and Jean-Marc Robert</i>	
Remote Evaluation of WCAG 2.0 Techniques by Web Users with Visual Disabilities	285
<i>Christopher Power, Helen Petrie, André P. Freire, and David Swallow</i>	
Embedded Cultural Features in the Design of an Accessibility Agent for the Web	295
<i>Ingrid Teixeira Monteiro and Clarisse Sieckenius de Souza</i>	

Part III: Multimodality, Adaptation and Personalisation

Some Issues Regarding the Design of Adaptive Interface Generation Systems	307
<i>Julio Abascal, Amaia Aizpurua, Idoia Cearreta, Borja Gamecho, Nestor Garay, and Raúl Miñón</i>	

Search Intention Analysis for User-Centered Adaptive Visualizations ...	317
<i>Dirk Burkhardt, Matthias Breyer, Kawa Nazemi, and Arjan Kuijper</i>	
Adaptations Based on Ontology Evolution as a Mean to Exploit Collective Intelligence	327
<i>Laura Burzagli, Francesco Gabbanini, and Pier Luigi Emiliani</i>	
The Contribution of Multimodal Adaptation Techniques to the GUIDE Interface	337
<i>José Coelho and Carlos Duarte</i>	
Adapting Multimodal Fission to User's Abilities	347
<i>David Costa and Carlos Duarte</i>	
Self-adapting TV Based Applications	357
<i>Daniel Costa and Carlos Duarte</i>	
A Survey on Guiding Logic for Automatic User Interface Generation ...	365
<i>Gaurav Dubey</i>	
Adaptive Multimodal Fusion	373
<i>Pedro Feiteira and Carlos Duarte</i>	
Intelligent Working Environments for the Ambient Classroom	381
<i>Maria Korozi, Stavroula Ntoa, Margherita Antona, and Constantine Stephanidis</i>	
Adaptive Interfaces: A Little Learning Is a Dangerous Thing.....	391
<i>Kyle Montague, Vicki L. Hanson, and Andy Cogley</i>	
A Novel Design Approach for Multi-device Adaptable User Interfaces: Concepts, Methods and Examples	400
<i>Alexandros Mourouzis, Asterios Leonidis, Michalis Foukarakis, Margherita Antona, and Nicos Maglaveras</i>	
Cultural Difference in Nonverbal Behaviors in Negotiation Conversations: Towards a Model for Culture-Adapted Conversational Agents	410
<i>Fumie Nori, Afia Akhter Lipi, and Yukiko Nakano</i>	
An Investigation into a Personalised and Web2.0-Based Search Engine Interface	420
<i>Tsai-Hsuan Tsai, Hsien-Tsung Chang, and Shih-Ting Huang</i>	

Part IV: eInclusion Policy, Good Practice, Legislation and Security Issues

Cyber Risks to Secure and Private Universal Access	433
<i>G. Susanne Bahr, Liam M. Mayron, and Hannah J. Gacey</i>	

Towards Information Technology Security for Universal Access	443
<i>Shiran Cohen, Noam Ben-Asher, and Joachim Meyer</i>	
The Barriers to and Benefits of Use of ICT for People with Visual Impairment	452
<i>Kristin Skeide Fuglerud</i>	
Supporting a Shared Dialog on Healthcare Policy between Researchers, Practitioners, and the Lay Public: Creating the SpeakHealth Online Community	463
<i>David Gurzick, Lee Boot, Stacy Arnold, and Martha Chandler Gurzick</i>	
Social Inclusion through Digital Engagement	473
<i>Vicki L. Hanson</i>	
Legal and Policy Implications of Cloud Computing	478
<i>Eve Hill</i>	
Technology Support via Telephone – to Elderly and People with Disability	484
<i>Lars Johansson and Claes Tjäder</i>	
Virtual Structured Dialogic Design as Tool for Analysis of Threats Before Implementing European Dialogues Aiming to Identify R&D Gaps in Assistive ICT	492
<i>Yiannis Laouris, Georgina Siita, Patrick Roe, Pier-Luigi Emiliani, and Aleco Christakis</i>	
Investigation of Best Practices for Maintaining Section 508 Compliance in U.S. Federal Web Sites	498
<i>Jonathan Lazar and Abiodun Olalere</i>	
eInclusion: Policies and Concepts Regarding Persons with Disabilities – Considerations about Brazil and Portugal	507
<i>Ana Isabel B.B. Paraguay</i>	
Creating a Global Public Inclusive Infrastructure	517
<i>Gregg Vanderheiden and Jutta Treviranus</i>	
Author Index	527

Table of Contents – Part II

Part I: User Models, Personas and Virtual Humans

Standardizing User Models	3
<i>Pradipta Biswas and Patrick Langdon</i>	
Integral Model of the Area of Reaches and Forces of a Disabled Person with Dysfunction of Lower Limbs as a Tool in Virtual Assessment of Manipulation Possibilities in Selected Work Environments	12
<i>Bogdan Branowski, Piotr Pohl, Michal Rychlik, and Marek Zablocki</i>	
Modeling the Role of Empathic Design Engaged Personas: An Emotional Design Approach	22
<i>Robert C.C. Chen, Wen Cing-Yan Nivala, and Chien-Bang Chen</i>	
Accessible UI Design and Multimodal Interaction through Hybrid TV Platforms: Towards a Virtual-User Centered Design Framework	32
<i>Pascal Hamisu, Gregor Heinrich, Christoph Jung, Volker Hahn, Carlos Duarte, Pat Langdon, and Pradipta Biswas</i>	
Modelling Cognitive Impairment to Improve Universal Access	42
<i>Elina Jokisuu, Patrick Langdon, and P. John Clarkson</i>	
Integrating Human Modeling and Simulation with the Persona Method	51
<i>Taro Kanno, Tomohiko Ooyabu, and Kazuo Furuta</i>	
User Modeling through Unconscious Interaction with Smart Shop	61
<i>Toshikazu Kato</i>	
Supporting Inclusive Design of User Interfaces with a Virtual User Model	69
<i>Pierre T. Kirisci, Patrick Klein, Markus Modzelewski, Michael Lawo, Yehya Mohamad, Thomas Fiddian, Chris Bowden, Antoinette Fennell, and Joshue O Connor</i>	
Virtual User Concept for Inclusive Design of Consumer Products and User Interfaces	79
<i>Yehya Mohamad, Carlos A. Velasco, Jaroslav Pullmann, Michael Lawo, and Pierre Kirisci</i>	
Modeling Users for Adaptive Semantics Visualizations	88
<i>Kawa Nazemi, Dirk Burkhardt, Matthias Breyer, and Arjan Kuijper</i>	

An Investigation of a Personas-Based Model Assessment for Experiencing User-Centred Design	98
<i>Wen Cing-Yan Nivala, De-Lai Men, Tin-Kai Chen, and Robert C.C. Chen</i>	

Numerical Analysis of Geometrical Features of 3D Biological Objects, for Three-Dimensional Biometric and Anthropometric Database	108
<i>Michal Rychlik, Witold Stankiewicz, and Marek Morzynski</i>	

Part II: Older People in the Information Society

Designing Interactive Pill Reminders for Older Adults: A Formative Study	121
<i>Sepideh Ansari</i>	

Older User Errors in Handheld Touchscreen Devices: To What Extent Is Prediction Possible?	131
<i>Michael Bradley, Patrick Langdon, and P. John Clarkson</i>	

Affective Technology for Older Adults: Does Fun Technology Affect Older Adults and Change Their Lives?	140
<i>Ryoko Fukuda</i>	

Muntermacher – “Think and Move” Interface and Interaction Design of a Motion-Based Serious Game for the Generation Plus	149
<i>Holger Graf, Christian Tamanini, and Lukas Geissler</i>	

Preliminary Framework for Studying Self-reported Data in Electronic Medical Records within a Continuing Care Retirement Community	159
<i>Kelley Gurley and Anthony F. Norcio</i>	

Using Motion-Sensing Remote Controls with Older Adults	166
<i>Thomas von Bruhn Hinné and Simeon Keates</i>	

Design Lessons for Older Adult Personal Health Records Software from Older Adults	176
<i>Juan Pablo Hourcade, Elizabeth A. Chrischilles, Brian M. Gryzlak, Blake M. Hanson, Donald E. Dunbar, David A. Eichmann, and Ryan R. Lorentzen</i>	

Design and Development a Social Networks Platform for Older People	186
<i>Chien-Lung Hsu, Kevin C. Tseng, Chin-Lung Tseng, and Boo-Chen Liu</i>	

In Search of Information on Websites: A Question of Age?	196
<i>Eugène Loos</i>	

Preliminary Findings of an Ethnographical Research on Designing Accessible Geolocated Services with Older People	205
<i>Valeria Righi, Guiller Malón, Susan Ferreira, Sergio Sayago, and Josep Blat</i>	
An Experiment for Motivating Elderly People with Robot Guided Interaction	214
<i>Ryohei Sasama, Tomoharu Yamaguchi, and Keiji Yamada</i>	
Connecting Communities: Designing a Social Media Platform for Older Adults Living in a Senior Village	224
<i>Tsai-Hsuan Tsai, Hsien-Tsung Chang, Alice May-Kuen Wong, and Tsung-Fu Wu</i>	
A Telehealthcare System to Care for Older People Suffering from Metabolic Syndrome	234
<i>Kevin C. Tseng, Chien-Lung Hsu, and Yu-Hao Chuang</i>	
Narrating Past to Present: Conveying the Needs and Values of Older People to Young Digital Technology Designers	243
<i>Elizabeth Valentine, Ania Bobrowicz, Graeme Coleman, Lorna Gibson, Vicki L. Hanson, Saikat Kundu, Alison McKay, and Raymond Holt</i>	
Evaluating the Design, Use and Learnability of Household Products for Older Individuals	250
<i>Christopher Wilkinson, Patrick Langdon, and P. John Clarkson</i>	

Part III: Designing for Users Diversity

Disable Workstation Development: A Multicompetence Approach to Human Behaviour Analysis	263
<i>Giuseppe Andreoni, Fiammetta Costa, Carlo Frigo, Sabrina Muschiato, Esteban Pavan, Laura Scapini, and Maximiliano Romero</i>	
Making Visual Maps Accessible to the Blind	271
<i>Maria Claudia Buzzi, Marina Buzzi, Barbara Leporini, and Loredana Martusciello</i>	
Untapped Markets in Cloud Computing: Perspectives and Profiles of Individuals with Intellectual and Developmental Disabilities and Their Families	281
<i>Ann Cameron Caldwell</i>	
Patient-Centered Design: Interface Personalization for Individuals with Brain Injury	291
<i>Elliot Cole</i>	

An Information Theoretic Mouse Trajectory Measure	301
<i>Samuel Epstein, Eric S. Missimer, and Margrit Betke</i>	
Comparative Study between AZERTY-Type and K-Hermes Virtual Keyboards Dedicated to Users with Cerebral Palsy	310
<i>Yohan Guerrier, Maxime Baas, Christophe Kolski, and Franck Poirier</i>	
New Trends in Non-visual Interaction - Sonification of Maps	320
<i>Vidas Lauruska</i>	
Opportunities in Cloud Computing for People with Cognitive Disabilities: Designer and User Perspective	326
<i>Clayton Lewis and Nancy Ward</i>	
Adaptive Mouse-Replacement Interface Control Functions for Users with Disabilities	332
<i>John J. Magee, Samuel Epstein, Eric S. Missimer, Christopher Kwan, and Margrit Betke</i>	
A-Cross: An Accessible Crossword Puzzle for Visually Impaired Users	342
<i>Stavroula Ntoa, Ilia Adami, Giannis Prokopiou, Margherita Antona, and Constantine Stephanidis</i>	
Access-a-WoW: Building an Enhanced World of Warcraft™ UI for Persons with Low Visual Acuity	352
<i>G. Michael Poor, Thomas J. Donahue, Martez E. Mott, Guy W. Zimmerman, and Laura Marie Leventhal</i>	
Audiopolis, Navigation through a Virtual City Using Audio and Haptic Interfaces for People Who Are Blind	362
<i>Jaime Sánchez and Javiera Mascaró</i>	
Implications of Cloud Computing for People with Cognitive Disabilities	372
<i>James Sullivan, Clayton Lewis, and Jeffery Hoehl</i>	
Website Design and Usability Assessment Implications from a Usability Study with Visually Impaired Users	382
<i>Sarah J. Swierenga, Jieun Sung, Graham L. Pierce, and Dennis B. Propst</i>	
Disabled Youth in Sport Rivalry: What Are the Trends – Virtual or Real Competition?	390
<i>Katarzyna Ujma-Wasowicz</i>	
Advances in Game Accessibility from 2005 to 2010	400
<i>Thomas Westin, Kevin Bierre, Dimitris Gramenos, and Michelle Hinn</i>	

Tactics Choice Behaviors Represented in a Programming Language in the Map Tracing Problems	410
<i>Nobuhito Yamamoto, Syoko Shiroma, and Tomoyuki Nishioka</i>	

Part IV: Cultural and Emotional Aspects

Age-Related Accessibility Biases in Pass-Face Recognition	423
<i>Ray Adams, Gisela Susanne Bahr, and Ejder Sevgen Raif</i>	
Affective Climate of Workplace and Its Contributing Factors	432
<i>Waratta Authayarat and Hiroyuki Umemuro</i>	
Learning Culture-Specific Dialogue Models from Non Culture-Specific Data	440
<i>Kallirroi Georgila and David Traum</i>	
Dialog Behaviors across Culture and Group Size	450
<i>David Herrera, David Novick, Dusan Jan, and David Traum</i>	
Life in Affective Reality: Identification and Classification of Smiling in Early Childhood	460
<i>Fumito Kawakami and Akifumi Tokosumi</i>	
Investigation of Users' Reactions toward Various Kinds of Artificial Agents: Comparison of an Robotic Agent with an On-screen Agent	470
<i>Takanori Komatsu, Yuuki Seki, Ryohei Sasama, Tomoharu Yamaguchi, and Keiji Yamada</i>	
Sense of Presence in a Robotic Telepresence Domain	479
<i>Annica Kristoffersson, Silvia Coradeschi, Kerstin Severinson Eklundh, and Amy Loutfi</i>	
Exploration of the Cultural Image of Chinese Form Using Culture Identity Design	488
<i>Ying-Jye Lee and Cheih-Ying Chen</i>	
Museum Exhibit Content Recommendation and Guidance System Focusing on Experience Design	498
<i>Ding-Bang Luh, Chih-Lin Chiang, Ssu-Ling Huang, and Tsai-Lin Yang</i>	
General Factors That Elicit Human Affect across Countries	508
<i>Qin Tang and Hiroyuki Umemuro</i>	
Affective Technology through Affective Management	513
<i>Hiroyuki Umemuro</i>	
Do Hedonic and Eudaimonic Well-Being of Online Shopping Come from Daily Life Experience?	519
<i>Jia Zhang and Hiroyuki Umemuro</i>	

Part V: Eye Tracking, Gestures and Brain Interfaces

Eye Tracking and Universal Access: Three Applications and Practical Examples	525
<i>Michael Bartels and Sandra P. Marshall</i>	
Interpreting 3D Faces for Augmented Human-Computer Interaction	535
<i>Marinella Cadoni, Enrico Grosso, Andrea Lagorio, and Massimo Tistarelli</i>	
Social Environments, Mixed Communication and Goal-Oriented Control Application Using a Brain-Computer Interface	545
<i>Günter Edlinger and Christoph Guger</i>	
Tactile Hand Gesture Recognition through Haptic Feedback for Affective Online Communication	555
<i>Hae Youn Joung and Ellen Yi-Luen Do</i>	
Gesture-Based User Interfaces for Public Spaces	564
<i>Andreas Kratky</i>	
Towards Standardized User and Application Interfaces for the Brain Computer Interface	573
<i>Paul McCullagh, Melanie Ware, Alex McRoberts, Gaye Lightbody, Maurice Mulvenna, Gerry McAllister, José Luis González, and Vicente Cruz Medina</i>	
Head Movements, Facial Expressions and Feedback in Danish First Encounters Interactions: A Culture-specific Analysis	583
<i>Patrizia Paggio and Costanza Navarretta</i>	
EEG-Based Personalized Digital Experience	591
<i>Olga Sourina, Yisi Liu, Qiang Wang, and Minh Khoa Nguyen</i>	
Perspectives on User Experience Evaluation of Brain-Computer Interfaces	600
<i>Bram van de Laar, Hayrettin Gürkök, Danny Plass-Oude Bos, Femke Nijboer, and Anton Nijholt</i>	
BCIs in Multimodal Interaction and Multitask Environments: Theoretical Issues and Initial Guidelines	610
<i>Jan B.F. van Erp, Marieke E. Thurlings, Anne-Marie Brouwer, and Peter J. Werkhoven</i>	
Fitts' Law in Bivariate Pointing on Large Touch Screens: Age-Differentiated Analysis of Motion Angle Effects on Movement Times and Error Rates	620
<i>Sebastian Vetter, Jennifer Bützler, Nicole Jochems, and Christopher M. Schlick</i>	

Adaboost with SVM-Based Classifier for the Classification of Brain Motor Imagery Tasks	629
<i>Jue Wang, Lin Gao, Haoshi Zhang, and Jin Xu</i>	
AVIN (Assisted Visual Interactive Notepad): A Novel Interface Design to Expedite the Eye Writing Experience	635
<i>Xianjun Sam Zheng, Stuart Goose, Joeri Kiekebosch, and James Jeng-Weei Lin</i>	
Online BCI Implementation of High-Frequency Phase Modulated Visual Stimuli	645
<i>Danhua Zhu, Gary Garcia-Molina, Vojkan Mihajlović, and Ronald M. Aarts</i>	
Author Index	655

Table of Contents – Part III

Part I: Universal Access in the Mobile Context

Results of the Technical Validation of an Accessible Contact Manager for Mobile Devices	3
<i>Jon Azpiroz, Juan Bautista Montalvá Colomer, María Fernanda Cabrera-Umpiérrez, María Teresa Arredondo, and Julio Gutiérrez</i>	
Developing Accessible Mobile Phone Applications: The Case of a Contact Manager and Real Time Text Applications	12
<i>María Fernanda Cabrera-Umpiérrez, Adrián Rodríguez Castro, Jon Azpiroz, Juan Bautista Montalvá Colomer, María Teresa Arredondo, and Javier Cano-Moreno</i>	
BrailleTouch: Mobile Texting for the Visually Impaired	19
<i>Brian Frey, Caleb Southern, and Mario Romero</i>	
Supporting Universal Usability of Mobile Software: Touchscreen Usability Meta-Test	26
<i>Vlado Glavinic, Sandi Ljubic, and Mihael Kukec</i>	
Mobile Technologies for Promoting Health and Wellness among African American Youth	36
<i>Donovan Hill, Jasmine Blunt, Terrence Pugh, Monika Monk, Ji-Sun Kim, Woodrow W. Winchester III, D. Scott McCrickard, Paul Estabrooks, and Felicia Doswell</i>	
Privacy, Security and Interoperability of Mobile Health Applications....	46
<i>Joseette F. Jones, Sara A. Hook, Seong C. Park, and LaSha M. Scott</i>	
GeoDrinking: How to Extract Value from an Extended Social Wine Drinking Experience.....	56
<i>Alessandro Marcengo and Amon Rapp</i>	
Enhancing Mobile Interaction using WLAN Proximity	66
<i>W. Narzt and H. Schmitzberger</i>	
Tracking Observations of Everyday Living with Smart Phones	76
<i>Michelle Rogers</i>	
Effect of Protective Coating on the Performance of Wearable Antennas	84
<i>Minyoung Suh, Kate Carroll, and William Oxenham</i>	

The Effects of Font Size and Page Presentation Method of E-Book Reading on Small Screens for Older Adults	94
<i>Wang-Chin Tsai, Yi-Lin Ro, Ya-Tzu Chang, and Chang-Franw Lee</i>	
Product Form Feature Selection for Mobile Phone Design Using LS-SVR and ARD	102
<i>Chih-Chieh Yang, Meng-Dar Shieh, Kuang-Hsiung Chen, and Pei-Ju Lin</i>	
Mobile Wikipedia: A Case Study of Information Service Design for Chinese Teenagers	112
<i>Jia Zhou, P.L. Patrick Rau, Christoph Rohmer, Jie Zhou, Christophe Ghalayini, and Felix Roerig</i>	

Part II: Ambient Assisted Living and Smart Environments

A Method with Triaxial Acceleration Sensor for Fall Detection of the Elderly in Daily Activities	121
<i>Nan Bao, Cong Feng, Yan Kang, Lisheng Xu, Yuhang Du, Lei Zhang, Feifei Yang, and Qingchao Li</i>	
The REMOTE AAL Project: Remote Health and Social Care for Independent Living of Isolated Elderly with Chronic Conditions	131
<i>Angelos Bekiaris, Alexandros Mourouzis, and Nicos Maglaveras</i>	
Observe the User Interactive Behavior with a Large Multi-touch Display in Public Space	141
<i>Chien-Hsu Chen, Hsiao-Mei Hung, I.-Jui Lee, Yu-Wen Chen, and Fong-Gong Wu</i>	
Detection of Wheelchair User Activities Using Wearable Sensors	145
<i>Dan Ding, Shivayogi Hiremath, Younghyun Chung, and Rory Cooper</i>	
Universal Access in Ambient Intelligent Environments: A Research Agenda	153
<i>Pier Luigi Emiliani, Laura Burzagli, and Francesco Gabbanini</i>	
Mobile Interfaces for Better Living: Supporting Awareness in a Smart Home Environment	163
<i>Denis Gračanin, D. Scott McCrickard, Arthur Billingsley, Roosevelt Cooper, Tavon Gatling, Erik J. Irvin-Williams, Felicia Osborne, and Felicia Doswell</i>	

Design and Development of Four Prototype Interactive Edutainment Exhibits for Museums	173
<i>Dimitris Grammenos, Xenophon Zabulis, Damien Michel, Thomas Sarmis, Giannis Georgalis, Konstantinos Tzevanidis, Antonis Argyros, and Constantine Stephanidis</i>	
Informatics as Semiotics Engineering: Lessons learned from Design, Development and Evaluation of Ambient Assisted Living Applications for Elderly People	183
<i>Andreas Holzinger, Gig Searle, Andreas Auringer, and Martina Ziefle</i>	
iAWN: Designing Smart Artifacts for Sustainable Awareness	193
<i>Taysheng Jeng, Yu-Pin Ma, and Yang-Ting Shen</i>	
A System for Enhanced Situation Awareness with Outdoor Augmented Reality	203
<i>Jan A. Neuhöfer and Thomas Alexander</i>	
Implementation of the ISO/IEC 24756 for the Interaction Modeling of an AAL Space	210
<i>Pilar Sala, Carlos Fernandez, Juan Bautista Mocholí, Pablo Presencia, and Juan Carlos Naranjo</i>	
Virtual Reality for AAL Services Interaction Design and Evaluation	220
<i>Pilar Sala, Felix Kamieth, Juan Bautista Mocholí, and Juan Carlos Naranjo</i>	
Young by Design: Supporting Older Adults' Mobility and Home Technology Use through Universal Design and Instruction	230
<i>Michael Sengpiel</i>	
Towards an Evidence-Based and Context-Aware Elderly Caring System Using Persuasive Engagement	240
<i>Yu Chun Yen, Ching Hu Lu, Yi Chung Cheng, Jing Siang Chen, and Li Chen Fu</i>	

Part III: Driving and Interaction

Towards an Integrated Adaptive Automotive HMI for the Future	253
<i>Angelos Amditis, Katia Pagle, Gustav Markkula, and Luisa Andreone</i>	
Lessons Learned Regarding Simulator Sickness in Older Adult Drivers	263
<i>Nicholas D. Cassavaugh, Joshua E. Domeyer, and Richard W. Backs</i>	
Design of Human Computer Interfaces for Highly Automated Vehicles in the EU-Project HAVEit	270
<i>Frank Flemisch, Anna Schieben, Nadja Schoemig, Matthias Strauss, Stefan Lueke, and Anna Heyden</i>	

Towards User-Centred Development of Integrated Information, Warning, and Intervention Strategies for Multiple ADAS in the EU Project interactIVe	280
<i>Tobias Hesse, Johan Engström, Emma Johansson, Giuseppe Varalda, Martin Brockmann, Amon Rambaldini, Nicola Fricke, Frank Flemisch, Frank Köster, and Lena Kanstrup</i>	
The Comparison of Different Sensory Outputs on the Driving Overtake Alarm System	290
<i>Yu-Chun Huang, Chia-Jung Tsai, Jo-Yu Kuo, and Fong-Gong Wu</i>	
I Can't Hear You? Drivers Interacting with Male or Female Voices in Native or Non-native Language	298
<i>Ing-Marie Jonsson and Nils Dahlbäck</i>	
Monitoring User Distraction in a Car by Segmentation of Experimental Data	306
<i>Tomáš Macek, Martin Labský, Jan Kleindienst, and Hana Trusková</i>	
On-Road Pilot Study on the Need for Integrated Interfaces of In-Vehicle Driver Support Systems	316
<i>Evangelia Portouli, Vassilis Papakostopoulos, and Nicolas Marmaras</i>	

Part IV: Interactive Technologies in the Physical and Built Environment

New Design – Integration of Art and Technology	329
<i>Wojciech Bonenberg</i>	
Chetoe.com: An Integrated Web 2.0 Service for Automatically Travel Planning	338
<i>Hsien-Tsung Chang, Zi-Ning Liu, Yi-Ting Wang, Che-Wen Chang, and Chia-An Hung</i>	
Evolution of Domestic Kitchen	348
<i>Jerzy Charytonowicz and Dzoana Latala</i>	
Perception and Illusion in Interior Design	358
<i>Anna Jaglarz</i>	
Spaces of Mutable Shape and the Human Ability to Adapt	365
<i>Katarzyna Kubsik</i>	
Using a Visual Assistant to Travel Alone within the City	372
<i>Yves Lachapelle, Dany Lussier-Desrochers, Martin Caouette, and Martin Therrien-Bélec</i>	

The Computer – A Tool That Makes Human Environment: Technosphere	378
<i>Beata Majerska-Palubicka</i>	
Machinery Design for Construction Safety in Practice.....	388
<i>Beata Mrugalska and Aleksandra Kawecka-Endler</i>	
The Design and Manufacture of Functional Micro-stationary PCR Chip	398
<i>Jinquan Nie, Yulong Zhao, Yimin Liu, Keyin Liu, and Niancai Peng</i>	
Thermal Preparation of Food and Its Influence on Shaping the Old and Modern Kitchen	405
<i>Przemysław Nowakowski</i>	
mGuides, Design and Usability of a Mobile System to Assist Learning in Critical Situations	415
<i>Jaime Sánchez and Matías Espinoza</i>	
Smart Cities, Ambient Intelligence and Universal Access	425
<i>Norbert A. Streitz</i>	
Author Index	433

Table of Contents – Part IV

Part I: Speech, Communication and Dialogue

Greek Verbs and User Friendliness in the Speech Recognition and the Speech Production Module of Dialog Systems for the Broad Public	3
<i>Christina Alexandris and Ioanna Malagardi</i>	
Intercultural Dynamics of First Acquaintance: Comparative Study of Swedish, Chinese and Swedish-Chinese First Time Encounters	12
<i>Jens Allwood, Nataliya Berbyuk Lindström, and Jia Lu</i>	
Greek WordNet and Its Extension with Terms of the Computer Science Domain	22
<i>Panagiotis Blitsas and Maria Grigoriadou</i>	
An Experimental Study of the Use of Multiple Humanoid Robots as a Social Communication Medium	32
<i>Kotaro Hayashi, Takayuki Kanda, Hiroshi Ishiguro, Tsukasa Ogasawara, and Norihiro Hagita</i>	
A Multitasking Approach to Adaptive Spoken Dialogue Management . . .	42
<i>Tobias Heinroth, Dan Denich, and Wolfgang Minker</i>	
From Clouds to Rain: Consolidating and Simplifying Online Communication Services with Easy One Communicator	52
<i>Jeffery Hoehl and Gregg Vanderheiden</i>	
Use of Speech Technology in Real Life Environment	62
<i>Ruimin Hu, Shaojian Zhu, Jinjuan Feng, and Andrew Sears</i>	
Metagnostic Deductive Question Answering with Explanation from Texts	72
<i>John Kontos, Joseph Armaos, and Ioanna Malagardi</i>	
Collecting an American Sign Language Corpus through the Participation of Native Signers.	81
<i>Pengfei Lu and Matt Huenerfauth</i>	
Fuzzy-Logic Controller for Speaker-Independent Speech Recognition System in Computer Games	91
<i>Moyen Mohammad Mustaqim</i>	
Building of Turn-Taking Avatars That Express Utterance Attitudes: A Social Scientific Approach to Behavioral Design of Conversational Agents	101
<i>Masahide Yuasa and Naoki Mukawa</i>	

Part II: Interacting with Documents and Images

Visual Design Elements of Photos on Taiwanese Female Clothing On-line Sales	111
<i>Ro-Han Chang, Tsai-Rong Yu, and Yao-Cheng Tsai</i>	
Web Application for Analysis, Manipulation and Generation of Accessible PDF Documents	121
<i>Alireza Darvishy, Hans-Peter Hutter, and Oliver Mannhart</i>	
Survey: Improving Document Accessibility from the Blind and Visually Impaired User's Point of View	129
<i>Martin Dorigo, Bettina Harriehausen-Mühlbauer, Ingo Stengel, and Paul S. Dowland</i>	
Readable Image for the Visually Impaired	136
<i>Sunil Kumar Kopparapu</i>	
Camera Canvas: Image Editing Software for People with Disabilities	146
<i>Christopher Kwan and Margrit Betke</i>	
Exact Compensation of Color-Weakness with Discrimination Threshold Matching	155
<i>Rika Mochizuki, Satoshi Oshima, Reiner Lenz, and Jinhui Chao</i>	
Collaborative Editing for All: The Google Docs Example	165
<i>Giulio Mori, Maria Claudia Buzzi, Marina Buzzi, Barbara Leporini, and Victor M.R. Penichet</i>	
Acoustic Modeling of Dialogue Elements for Document Accessibility	175
<i>Pepi Stavropoulou, Dimitris Spiliotopoulos, and Georgios Kouroupetroglou</i>	

Part III: Universal Access in Complex Working Environments

Seeing the Wood for the Trees Again! SMART - A Holistic Way of Corporate Governance Offering a Solution Ready to Use	187
<i>Fritz Bastarz and Patrick Halek</i>	
Using Human Service Center Interfaces and Their Information to Foster Innovation Management	195
<i>Klaus-Peter Faehnrich, Kyrill Meyer, and Benjamin Udo Strehl</i>	
Key Features of Subject-Oriented Modeling and Organizational Deployment Tools	205
<i>Albert Fleischmann and Christian Stary</i>	

The Effect of a GPS on Learning with Regards to Performance and Communication in Municipal Crisis Response	215
<i>Helena Granlund, Rego Granlund, and Nils Dahlbäck</i>	
Crisis Management Training: Techniques for Eliciting and Describing Requirements and Early Designs across Different Incident Types	225
<i>Ebba Thora Hvannberg and Jan Rudinsky</i>	
Development of Mobile Evacuation Guides for Travellers and Rescue Personnel	235
<i>Viveca Jimenez-Mixco, Jan Paul Leuteritz, Eugenio Gaeta, Maria Fernanda Cabrera-Umpierrez, María Teresa Arredondo, Harald Widbrother, and Mary Panou</i>	
Stakeholder-Driven Business Process Management: “An Evaluation of the Suitability, Adequacy and Effectiveness of Quality and Process Management”	244
<i>Michael Jungen</i>	
Evaluation of a Mobile AR Tele-Maintenance System	253
<i>Michael Kleiber and Thomas Alexander</i>	
Knowledge in Digital Decision Support System	263
<i>Erika Matsak and Peeter Lorents</i>	
Examining the Current State of Group Support Accessibility: A Focus Group Study	272
<i>John G. Schoeberlein and Yuanqiong (Kathy) Wang</i>	
BioSEME: A Semantically-Integrated Content Management System for Cancer Research	282
<i>Ionut Mihai Stancu</i>	
Age Dependent Differences in the Usage of a Desktop VR System for Air Force Mission Planning and Preparation	292
<i>Carsten Winkelholz and Michael Kleiber</i>	
A Concept for User-Centered Development of Accessible User Interfaces for Industrial Automation Systems and Web Applications	301
<i>Farzan Yazdi, Helmut Vieritz, Nasser Jazdi, Daniel Schilberg, Peter Göhner, and Sabina Jeschke</i>	

Part IV: Well-Being, Health and Rehabilitation Applications

Forms of Interaction in Virtual Space: Applications to Psychotherapy and Counselling	313
<i>Shagun Chawla and Nigel Foreman</i>	

Control of Powered Prosthetic Hand Using Multidimensional Ultrasound Signals: A Pilot Study	322
<i>Xin Chen, Siping Chen, and Guo Dan</i>	
A Top-k Analysis Using Multi-level Association Rule Mining for Autism Treatments.....	328
<i>Kelley M. Engle and Roy Rada</i>	
Pregnancy Test for the Vision-Impaired Users	335
<i>Tereza Hyková, Adam J. Sporka, Jan Vystrčil, Martin Klíma, and Pavel Slavík</i>	
Effect of Spinal Cord Injury on Nonlinear Complexity of Skin Blood Flow Oscillations	345
<i>Yih-Kuen Jan, Fuyuan Liao, and Stephanie Burns</i>	
Developing Protégé to Structure Medical Report	356
<i>Josette Jones, Kanitha Phalakornkule, Tia Fitzpatrick, Sudha Iyer, and C. Zorina Ombac</i>	
Increasing Physical Activity by Implementing a Behavioral Change Intervention Using Pervasive Personal Health Record System: An Exploratory Study	366
<i>Hadi Kharrazi and Lynn Vincz</i>	
Exploring Health Website Users by Web Mining	376
<i>Wei Kong and Josette Jones</i>	
Double Visual Feedback in the Rehabilitation of Upper LIMB	384
<i>Liu Enchen, Sui Jianfeng, and Ji Linhong</i>	
Can User Tagging Help Health Information Seekers?.....	389
<i>Malika Mahoui, Josette Jones, Andrew Meyerhoff, and Syed Ahmed Toufeeq</i>	
Interactive Medical Volume Visualizations for Surgical Online Applications.....	398
<i>Konrad Mühler, Mathias Neugebauer, and Bernhard Preim</i>	
Age-Adapted Psychoacoustics: Target Group Oriented Sound Schemes for the Interaction with Telemedical Systems	406
<i>Alexander Mertens, Philipp Przybysz, Alexander Groß, David Koch-Koerfges, Claudia Nick, Martin Kaethner, and Christopher M. Schlick</i>	
Bringing the Home into the Hospital: Assisting the Pre-Discharge Home Visit Process Using 3D Home Visualization Software.....	416
<i>Arthur G. Money, Anne McIntyre, Anita Atwal, Georgia Spiliotopoulou, Tony Elliman, and Tim French</i>	

Design of a Paired Patient-Caregiver Support Application for People Coping with Cancer	427
<i>Christine M. Newlon, Robert Skipworth Comer, Kim Wagler-Ziner, and Anna M. McDaniel</i>	
Importance of Physical Interaction between Human and Robot for Therapy	437
<i>Takanori Shibata</i>	
The Relationships between Morphology and Work for the Nursing Performance of Hand Controls in Emergency Surgery	448
<i>Chao-Yuan Tseng and Fong-Gong Wu</i>	
Upper Limb Contralateral Physiological Characteristic Evaluation for Robot-Assisted Post Stroke Hemiplegic Rehabilitation	458
<i>Lap-Nam Wong, Qun Xie, and Linhong Ji</i>	
A Case Study of the Design and Evaluation of a Persuasive Healthy Lifestyle Assistance Technology: Challenges and Design Guidelines	464
<i>Jie Xu, Ping-yu Chen, Scott Uglow, Alison Scott, and Enid Montague</i>	
Novel Human-Centered Rehabilitation Robot with Biofeedback for Training and Assessment	472
<i>Runze Yang, Linhong Ji, and Hongwei Chen</i>	
Intensity Analysis of Surface Myoelectric Signals from Lower Limbs during Key Gait Phases by Wavelets in Time-Frequency	479
<i>Jiangang Yang, Xuan Gao, Baikun Wan, Dong Ming, Xiaoman Cheng, Hongzhi Qi, Xingwei An, Long Chen, Shuang Qiu, and Weijie Wang</i>	
Handle Reaction Vector Analysis with Fuzzy Clustering and Support Vector Machine during FES-Assisted Walking Rehabilitation	489
<i>Weixi Zhu, Dong Ming, Baikun Wan, Xiaoman Cheng, Hongzhi Qi, Yuanyuan Chen, Rui Xu, and Weijie Wang</i>	

Part V: Universal Access to Education and Learning

From “Reading” Math to “Doing” Math: A New Direction in Non-visual Math Accessibility	501
<i>Nancy Alajarmeh, Enrico Pontelli, and Tran Son</i>	
Accessible Education for Autistic Children: ABA-Based Didactic Software	511
<i>Silvia Artoni, Maria Claudia Buzzi, Marina Buzzi, Claudia Fenili, and Simona Mencarini</i>	

Educational Impact of Structured Podcasts on Blind Users	521
<i>Maria Claudia Buzzi, Marina Buzzi, Barbara Leporini, and Giulio Mori</i>	
A New Structure of Online Learning Environment to Support the Professional Learning	530
<i>Wenzhi Chen and Yu-How Lin</i>	
Behaviour Computer Animation, Communicability and Education for All	538
<i>Francisco V. Cipolla Ficarra, Jacqueline Alma, and Miguel Cipolla-Ficarra</i>	
An Intelligent Task Assignment and Personalization System for Students' Online Collaboration	548
<i>Asterios Leonidis, George Margetis, Margherita Antona, and Constantine Stephanidis</i>	
Using Interface Design with Low-Cost Interactive Whiteboard Technology to Enhance Learning for Children	558
<i>Chien-Yu Lin, Fong-Gong Wu, Te-Hsiung Chen, Yan-Jin Wu, Kenendy Huang, Chia-Pei Liu, and Shu-Ying Chou</i>	
Integration of a Spanish-to-LSE Machine Translation System into an e-Learning Platform	567
<i>Fernando López-Colino, Javier Tejedor, Jordi Porta, and José Colás</i>	
Towards Ambient Intelligence in the Classroom	577
<i>George Margetis, Asterios Leonidis, Margherita Antona, and Constantine Stephanidis</i>	
Learning Styles and Navigation Patterns in Web-Based Education.	587
<i>Jelena Nakić, Nikola Marangunić, and Andrina Granić</i>	
Phynocation: A Prototyping of a Teaching Assistant Robot for C Language Class	597
<i>Akihiro Ogino, Haruaki Tamada, and Hirotada Ueda</i>	
A Generic OSGi-Based Model Framework for Delivery Context Properties and Events	605
<i>Jaroslav Pullmann, Yehya Mohamad, Carlos A. Velasco, and Stefan P. Carmien</i>	
Inclusive Scenarios to Evaluate an Open and Standards-Based Framework That Supports Accessibility and Personalisation at Higher Education.	612
<i>Alejandro Rodriguez-Ascaso, Jesus G. Boticario, Cecile Finat, Elena del Campo, Mar Saneiro, Eva Alcocer, Emmanuelle Gutiérrez y Restrepo, and Emanuela Mazzone</i>	

Relationship between BPM Education and Business Process Solutions: Results of a Student Contest	622
<i>Werner Schmidt</i>	
Design of a Multi-interface Creativity Support Tool for the Enhancement of the Creativity Process	632
<i>George A. Sielis, George A. Papadopoulos, and Andrina Granić</i>	
Shadow Expert Technique (SET) for Interaction Analysis in Educational Systems	642
<i>Christian Stickel, Martin Ebner, and Andreas Holzinger</i>	
On Interactive Interfaces for Learning Chinese Character Writing Online	652
<i>Manlai You, Yu-Jie Xu, and Cherng Chin</i>	
Personalization in Mobile Learning for People with Special Needs	662
<i>Saeed Zare</i>	
Intelligent Provision of Semantic Web Services in Educational Systems	670
<i>Marija Zelić, Marko Rosić, and Vlado Glavinić</i>	
Author Index	681