Contents – Part III

Designing the Social Media Experience

Social Media Interactions and the Use of Third-Party Management Applications on Effectiveness and Perception of Information .................. 3
Çakır Aker and Ö zgürol Ö ztürk

Design Process of a Social Network System for Storage and Share Files in the Workplace. ................................................................. 13
Heloisa Candello, Silvia Bianchi, and Leandro Cassa

Evolution of e-Research: From Infrastructure Development to Service Orientation ................................................................. 25
Hashim Iqbal Chumpir, Thomas Ludwig, and Dean N. Williams

Visualizing Group User Behaviors for Social Network Interaction Design Iteration ................................................................. 36
Zhenyu Gu, Jia Ming Yu, Zhanwei Wu, and Zhan Xun Dong

Understanding the Semantics of Web Interface Signs: A Set of Ontological Principals ................................................................. 46
Muhammad Nazrul Islam and A.K.M. Najmul Islam

Cultural Reflections in Qatari Government Websites .......................... 54
Nouf Khashman

Usability Analysis of IxDA.org .......................................................... 63
Julija Naskova

How We Perceive Search Engines .................................................. 74
Leonardo Penna and Manuela Quaresma

Clicking Through Endless Seas: Understanding User Experience in the Design of Journalistic Websites ............................................ 82
Ben Posetti

Origins and Perspectives on Designing Virtual Communities of Practice for Permanent Education: A Case Study in the Collective Health Sector .......................... 94
Carlos Eduardo Ribeiro and Cláudia Renata Mont’Alvão

The Challenges and Opportunities of Designing National Digital Services for Cross-Border Use .................................................. 104
Molly Schwartz and Heli Kautonen
Designing the Learning Experience

Heuristic Evaluation of University Institutional Repositories Based on DSpace ......................... 119
   Maha Aljohani and James Blustein

Building Information Architecture Criteria for Assessing and Evaluating Universities’ Web Portals  ......................... 131
   Hamad Ibrahim Alomran

Designing with Young Children: Lessons Learned from a Co-creation of a Technology-Enhanced Playful Learning Environment  ......................... 142
   Nanna Borum, Eva Petersson Brooks, and Anthony Lewis Brooks

Application of Dashboards and Scorecards for Learning Models IT Risk Management: A User Experience  ......................... 153
   Ernesto Celi

Mapping Metaphors for the Design of Academic Library Websites  ......................... 166
   Ming-Hsin Phoebe Chiu

A Holistic Approach to User Experience in the Context of an Academic Library Interactive System  ......................... 173
   Andrea Alessandro Gasparini

Antique School Furniture, New Technological Features Needs  ......................... 185
   Andreia Gomes, Ernesto Filgueiras, and Luis Lavin

Analysis of Usability and Information Architecture of the UFRN Institutional Repository  ......................... 197
   Débora Koshiyama, André Luís Santos de Pinho, and José Guilherme Santa Rosa

Ergonomic and Usability Analysis of Interactive Whiteboards in the Academic Environment  ......................... 208
   Eduardo Oliveira, Erick Vasconcelos, Elzani Sobral, Sayonara Bittencourt, Tiago Ramos, and Marcelo M. Soares

E-Learning Platforms and Lacking Motivation in Students: Concept of Adaptable UI for Online Courses  ......................... 218
   Hana Ovesleová

A Usability Study with Children on an Online Educational Platform  ......................... 228
   Tuba Ugras and Orhan Sener

Evaluating an Education Department Portal: A Case Study  ......................... 240
   Xiaojun Yuan, Huahai Yang, Kathleen Moorhead, and Kathleen DeMers
### Designing the Playing Experience

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ads-on Games and Fake Brands: Interactions, Commercials</td>
<td>251</td>
</tr>
<tr>
<td>Herlander Elias, Ernesto Filgueiras, and Breno Carvalho</td>
<td></td>
</tr>
<tr>
<td>Heartbeat Jenga: A Biofeedback Board Game to Improve Coordination</td>
<td>263</td>
</tr>
<tr>
<td>Yu-Chun Huang and Chung-Hay Luk</td>
<td></td>
</tr>
<tr>
<td>Evaluation of User Experience in Interaction with Computer Games</td>
<td>271</td>
</tr>
<tr>
<td>Tihana Lapaš and Tihomir Orehovački</td>
<td></td>
</tr>
<tr>
<td>Doctor Who: Legacy, an Analysis of Usability and Playability</td>
<td>283</td>
</tr>
<tr>
<td>Rennan Raffaele, Renato Alencar, Iran Júnior, Bruno Colley, Gabriel Pontes, Breno Carvalho, and Marcelo M. Soares</td>
<td></td>
</tr>
<tr>
<td>Newsgames: Gameplay and Usability in Simulation Games</td>
<td>292</td>
</tr>
<tr>
<td>Carla Teixeira, Breno Carvalho, Jarbas Agra, Valeska Martins, Anthony Lins, Marcelo M. Soares, and André Neves</td>
<td></td>
</tr>
<tr>
<td>Improving Song Guessing Games Through Music Track Composition</td>
<td>303</td>
</tr>
<tr>
<td>João Marcelo Teixeira, Dicksson Almeida, Edvar Neto, and Veronica Teichrieb</td>
<td></td>
</tr>
<tr>
<td>Evaluating and Customizing User Interaction in an Adaptive Game Controller</td>
<td>315</td>
</tr>
<tr>
<td>Leonardo Torok, Mateus Pelegrino, Jefferson Lessa, Daniela Gorski Trevisan, Cristina N. Vasconcelos, Esteban Clua, and Anselmo Montenegro</td>
<td></td>
</tr>
<tr>
<td>New Research Methods for Media and Cognition Experiment Course</td>
<td>327</td>
</tr>
<tr>
<td>Yi Yang, Shengjin Wang, and Liangrui Peng</td>
<td></td>
</tr>
</tbody>
</table>

### Designing the Urban Experience

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning from Hourly Household Energy Consumption: Extracting, Visualizing and Interpreting Household Smart Meter Data</td>
<td>337</td>
</tr>
<tr>
<td>Sam Borgeson, June A. Flora, Jungsuk Kwac, Chin-Woo Tan, and Ram Rajagopal</td>
<td></td>
</tr>
<tr>
<td>Defining HCI/UX Principles for Urban Environment</td>
<td>346</td>
</tr>
<tr>
<td>Pavel Farkas</td>
<td></td>
</tr>
<tr>
<td>Participatory Explorations on a Location Based Urban Information System</td>
<td>357</td>
</tr>
<tr>
<td>Özge Genç, Damla Çay, and Asm Evren Yantaç</td>
<td></td>
</tr>
</tbody>
</table>
Diffusion of Feedback: Perceptions and Adoption of Devices in the Residential Market .................................................. 368
    Beth Karlin, Angela Sanguinetti, Nora Davis, Kristen Bendanna, Kristen Holdsworth, Jessie Baker, David Kirkby, and Daniel Stokols

Design and Implementation of a Mobile Cloud Environmental Application for Riyadh City .................................... 380
    Heba Kurdi, Amani Al-Fayez, Anfal Al-Tuwaim, Hanan Al-Mohammadi, Mona Al-Mutairi, and Sarah Al-Kharji

How Do I Get to Room 3106?: Student Wayfinding Designs for Old Main at Wayne State University .......................... 390
    Judith A. Moldenhauer

A Practice on Wayfinding System Design with Service Design Thinking .......................................................... 400
    Jing Pan and Zhengsheng Yin

Hidden Presence: Sensing Occupancy and Extracting Value from Occupancy Data ............................................. 412
    Larissa Suzuki, Peter Cooper, Theo Tryfonas, and George Oikonomou

Designing Apps for Tourists: A Case Study .................................. 425
    Virginia Tiradentes Souto, Caio Cristo, Maria Gabriela Araújo, and Lucas Santos

Designing the Driving Experience

Designing for the Naturalistic Driving Experience .................................. 439
    Wanda Eugene, Jerone Dunbar, Alison Nolan, Juan E. Gilbert, and Renesha L. Hendrix

Exploring User Experience in the Wild: Facets of the Modern Car .................................................. 450
    Dimitrios Gkouskos, Ingrid Pettersson, MariAnne Karlsson, and Fang Chen

Drivers and Automation: A Study About Cultural and Behavioral Influence in the Interaction with Driver Assistants 462
    Rafael Cirino Gonçalves and Manuela Quaresma

Going on a Road-Trip with My Electric Car: Acceptance Criteria for Long-Distance-Use of Electric Vehicles 473
    Julian Halbey, Sylvia Kowalewski, and Martina Ziefe

A Study on a Split-View Navigation System .................................. 485
    Jongsung Lee, Heewon Lee, and Sung Woo Kim
Contents – Part III XVII

What Travelers Want: An Investigation into User Needs and User Wants on Display .................................................. 496
Tingyi S. Lin and Chia-Nien Chang

Head Up Display in Automotive: A New Reality for the Driver .............. 505
Annie Pauzie

What Are the Expectations of Users of an Adaptive Recommendation Service Which Aims to Reduce Driver Distraction? .................. 517
Nadine Walter, Benjamin Kaplan, Carmen Wettemann, Tobias Altmüller, and Klaus Bengler

Cross Cultural Comparison of Users’ Barge-in with the In-Vehicle Speech System .................................................. 529
Peggy Wang, Ute Winter, and Timothy Grost

Designing the Healthcare Patient’s Experience

PostureMonitor: Real-Time IMU Wearable Technology to Foster Poise and Health .................................................. 543
Fatemeh Abyarjoo, Nonnarit O-Larnnithipong, Sudarat Tangnimitchok, Francisco Ortega, and Armando Barreto

Robot-Era Project: Preliminary Results on the System Usability .......... 553
Roberta Bevilacqua, Elisa Felici, Fiorella Marcellini, Sebastian Glende, Susann Klemcke, Isabel Conrad, Raffaele Esposito, Filippo Cavallo, and Paolo Dario

User Experience Research on the Rehabilitation System of Speech-Impaired Children: A Case Study on Speech Training Product ........ 562
Wenyi Cai, Jun Liu, Qiang Liu, and Ting Han

“Keep What You’ve Earned”: Encouraging Sailors to Drink Responsibly .... 575
Kristina Cook, Erin Brennan, Colleen Gray, and Teha Kennard

The Use of Generative Techniques in Co-design of mHealth Technology and Healthcare Services for COPD Patients .................. 587
Anita Das, Silje Bøthun, Jarl Reitan, and Yngve Dahl

Human-Computer Interaction in Bed ........................................ 596
Gustavo Desouzart and Ernesto Filgueiras

Designing an Interface Agent-Based Architecture for Creating a Mobile System of Medical Care .................................. 606
Ariel Escobar Endara and Carlos José Pereira de Lucena
A Study of Conversation Support System Between the Elderly Person and Young Adults by Using Facial Expression Analysis
Miyuki Iwamoto, Noriaki Kuwahara, and Kazunari Morimoto

The Turkish Central Doctor Rendezvous System Under Spotlight: A User Study with Turkish Senior Users
Edibe Betül Karbay and Kerem Rızvanoğlu

Evaluation of Users Acceptance of a Digital Medicine Fact Sheet: Findings from a Focus Group
Amélia Lageiro, Catarina Lisboa, and Emília Duarte

Designing for the Healthcare Professional’s Experience

An Internet of Things Application with an Accessible Interface for Remote Monitoring Patients
Chrystinne Oliveira Fernandes and Carlos José Pereira de Lucena

Three-Dimensional Models and Simulation Tools Enabling Interaction and Immersion in Medical Education
Soeli T. Fiorini, Leonardo Frajhof, Bruno Alvares de Azevedo, Jorge R. Lopes dos Santos, Heron Werner, Alberto Raposo, and Carlos José Pereira de Lucena

MedData: A Mobile Application Designed for Medical Teams to Monitor Clinical Evolution of Inpatient in ICU Context
Carlos Alberto Pereira de Lucena, Cláudia Renata Mont’Alvão, and Bruno Alvares de Azevedo

A Usability Study of a Gesture Recognition System Applied During the Surgical Procedures
Antonio Opromolla, Valentina Volpi, Andrea Ingrosso, Stefano Fabri, Claudia Rapisano, Delia Passalacqua, and Carlo Maria Medaglia

A Novel User-Specific Wearable Controller for Surgical Robots

Author Index
Design, User Experience, and Usability: Interactive Experience Design
4th International Conference, DUXU 2015, Held as Part of HCI International 2015, Los Angeles, CA, USA, August 2-7, 2015, Proceedings, Part III
Marcus, A. (Ed.)
2015, XVIII, 708 p. 279 illus., Softcover
ISBN: 978-3-319-20888-6