

# Contents

## ArtsIT and DLI 2016, Day 1

ArtsIT + DLI: Invited Paper . . . . .	3
<i>Anthony L. Brooks</i>	
A Tangible Augmented Reality Toy Kit: Interactive Solution for Early Childhood Education . . . . .	12
<i>Yujie Zhu and Stephen Jia Wang</i>	
The Farm Game: A Game Designed to Follow Children's Playing Maturity . . . . .	20
<i>Emmanouil Zidianakis, Kalliopi Stratigi, Danae Ioannidi, Nikolaos Partarakis, Margherita Antona, and Constantine Stephanidis</i>	
SceneMaker: Creative Technology for Digital StoryTelling. . . . .	29
<i>Murat Akser, Brian Bridges, Giuliano Campo, Abbas Cheddad, Kevin Curran, Lisa Fitzpatrick, Linley Hamilton, John Harding, Ted Leath, Tom Lunney, Frank Lyons, Minhua Ma, John Macrae, Tom Maguire, Aiden McCaughey, Eileen McClory, Victoria McCollum, Paul Mc Kevitt, Adam Melvin, Paul Moore, Eleanor Mulholland, Karla Muñoz, Greg O'Hanlon, and Laurence Roman</i>	
Structuring Design and Evaluation of an Interactive Installation Through Swarms of Light Rays with Human-Artifact Model . . . . .	39
<i>Cumhur Erkut and Jonas Fehr</i>	
Gamify HCI: Device's Human Resolution for Dragging on Touch Screens in a Game with Lab and Crowd Participants. . . . .	47
<i>Allan Christensen, Simon André Pedersen, and Hendrik Knoche</i>	
Maze and Mirror Game Design for Increasing Motivation in Studying Science in Elementary School Students: The case of Maze and Mirror Workshop in Shimada elementary school of Japan . . . . .	55
<i>Sara Hojjat, Chiaki Fukuzaki, and Tomoyuki Sowa</i>	
Towards a Wearable Interface for Immersive Telepresence in Robotics . . . . .	65
<i>Uriel Martinez-Hernandez, Michael Szollosy, Luke W. Boorman, Hamideh Kerdegari, and Tony J. Prescott</i>	
Designing Digital Tools for Physiotherapy . . . . .	74
<i>Gabriela Postolache, Raul Oliveira, and Octavian Postolache</i>	

Enriching Location-Based Games with Navigational Game Activities . . . . .	89
<i>Stephanie Githa Nadarajah, Benjamin Nicholas Overgaard, Peder Walz Pedersen, Camilla Gisela Hansen Schnatterbeck, and Matthias Rehm</i>	
Pairing Craft-Making with Mandarin eBooks: An Investigation into the Potential Use of Craft for Language Learning by Preschoolers . . . . .	97
<i>Wil-Kie Tan, Stephen Jia Wang, and Jeffrey Janet</i>	
Toward a Decolonizing Approach to Game Studies: Philosophizing Computer Game with BCI . . . . .	105
<i>Hyunkyung Cho and Joonsung Yoon</i>	
CollaTrEx – Collaborative Context-Aware Mobile Training and Exploration . . . . .	113
<i>Jean Botev, Ralph Marschall, and Steffen Rothkugel</i>	
Increasing the Perceived Camera Velocity in 3D Racing Games by Changing Camera Attributes . . . . .	121
<i>Kristoffer Lind Holm, Nicolai Skovhus, and Martin Kraus</i>	
Assessment of Stand-Alone Displays for Time Management in a Creativity-Driven Learning Environment . . . . .	129
<i>Søren R. Frimodt-Møller</i>	
Sandtime: A Tangible Interaction Featured Gaming Installation to Encourage Social Interaction Among Children . . . . .	137
<i>Chulin Yang and Stephen Jia Wang</i>	
The Imitation Game to Cultural Heritage: A Human-like Interaction Driven Approach for Supporting Art Recreation . . . . .	145
<i>Fiammetta Marulli and Luca Vallifuoco</i>	
Enhancing the Multisensory Environment with Adaptive Game Audio Techniques. . . . .	154
<i>Ben Challis, Angela Kang, Rachel Rimmer, and Mark Hildred</i>	
Investigating the Effect of Scaffolding in Modern Game Design . . . . .	162
<i>Kasper Halkjær Jensen and Martin Kraus</i>	
<b>AstsIT and DLI 2016, Day 2</b>	
Multi-kinect Skeleton Fusion for Enactive Games . . . . .	173
<i>Nikolaj Marimo Støvring, Esbern Torgard Kaspersen, Jeppe Milling Korsholm, Yousif Ali Hassan Najim, Soraya Makhoulouf, Alireza Khani, and Cumhur Erkut</i>	

Analysing Emotional Sentiment in People's YouTube Channel Comments . . .	181
<i>Eleanor Mulholland, Paul Mc Kevitt, Tom Lunney, and Karl-Michael Schneider</i>	
Mobile Device Applications for Head Start Experience in Music. . . . .	189
<i>Szu-Ming Chung and Chun-Tsai Wu</i>	
The Effect of Interacting with Two Devices When Creating the Illusion of Internal State in Passive Tangible Widgets . . . . .	197
<i>Christoffer Bech, Andreas Heldbjerg Bork, Jakob Birch Memborg, Lasse Schöne Rosenlund, and Martin Kraus</i>	
A Multimodal Interaction Framework for Blended Learning . . . . .	205
<i>Nikolaos Vidakis, Kalafatis Konstantinos, and Georgios Triantafyllidis</i>	
Multimodal Detection of Music Performances for Intelligent Emotion Based Lighting . . . . .	212
<i>Esben Oxholm, Ellen K. Hansen, and Georgios Triantafyllidis</i>	
Widening the Experience of Artistic Sketchbooks . . . . .	220
<i>Henning Christiansen and Bjørn Laursen</i>	
Considerations and Methods for Usability Testing with Children. . . . .	228
<i>Malene Hjortboe Andersen, Md. Saifuddin Khalid, and Eva Irene Brooks</i>	
An Adaptation Framework for Turning Real Life Events into Games: The Design Process of the Refugee Game . . . . .	239
<i>Sacha Kærhus Therkildsen, Nanna Cassøe Bunkenborg, and Lasse Juel Larsen</i>	
Emotion Index of Cover Song Music Video Clips Based on Facial Expression Recognition . . . . .	248
<i>Georgios Kavalakis, Nikolaos Vidakis, and Georgios Triantafyllidis</i>	
The Opportunities of Applying the 360° Video Technology to the Presentation of Cultural Events . . . . .	256
<i>Nikolay Borisov, Artem Smolin, Denis Stolyarov, Pavel Shcherbakov, and Vasilii Trushin</i>	
Learning Together Apart – The Impact on Participation When Using Dialogic Educational Technologies for Kids with Attention and Developmental Deficits . . . . .	264
<i>Elsebeth Korsgaard Sorensen and Hanne Voldborg Andersen</i>	
Learning by Designing Interview Methods in Special Education . . . . .	272
<i>Lise Jönsson</i>	

Powerlessness or Omnipotence – the Impact of Structuring Technologies  
in Learning Processes for Children with Attention  
and Developmental Deficits . . . . . 280  
*Hanne Voldborg Andersen and Elsebeth Korsgaard Sorensen*

Pyramid Algorithm Framework for Real-Time Image Effects  
in Game Engines . . . . . 289  
*Adrià Arbués Sangüesa, Andreea-Daniela Ene,  
Nicolai Krogh Jørgensen, Christian Aagaard Larsen,  
Daniel Michelsanti, and Martin Kraus*

Introducing the Tripartite Digitization Model for Engaging  
with the Intangible Cultural Heritage of the City . . . . . 297  
*Matthias Rehm and Kasper Rodil*

Aesthetic Computing for Representation of the Computing Process  
and Expansion of Perceptual Dimensions: Cases for Art, Education,  
and Interfaces . . . . . 305  
*Myounghoon Jeon*

AcuTable: A Touch-Enabled, Actuated Tangible User Interface . . . . . 314  
*Simon Dibbern, Kasper Vestergaard Rasmussen, Daniel Ortiz-Arroyo,  
and Michael Boelstoft Holte*

**Author Index . . . . . 323**

Interactivity, Game Creation, Design, Learning, and  
Innovation

5th International Conference, ArtsIT 2016, and First  
International Conference, DLI 2016, Esbjerg, Denmark,  
May 2–3, 2016, Proceedings

Brooks, A.; Brooks, E. (Eds.)

2017, XIV, 324 p. 122 illus., Softcover

ISBN: 978-3-319-55833-2