

# Table of Contents

## RESEARCH AND VALIDATION

A Serious Game to Inform about HIV Prevention: HInVaders, à Case Study .....	3
<i>Stefania Artioli, Riccardo Berta, Alessandro De Gloria, Andrea Pomicino, Nicola Secco</i>	
From Kinect™ to anatomically-correct motion modelling: Preliminary results for human application. ....	15
<i>Bonnechère B., Sholukha V., Moiseev F., Rooze M., Van Sint Jan S.</i>	
Fear and Happiness in "Re-Mission": Teasing Out Emotional Gaming Events Responsible for Cancer Risk Perception.....	27
<i>Georges E. Khalil</i>	

## GAME DESIGN, DEVELOPMENT AND BUSINESS

Bias Blaster – Aiding Cognitive Bias Modification-Interpretation through a bubble shooter induced game-flow .....	47
<i>Bard O. Wartena and Hylke W. van Dijk</i>	
Attributing Design Decisions in the Evaluation of Game-Based Health Interventions .....	61
<i>E.P. Braad, J. Folkerts, and N. Jonker</i>	
Servitization versus Commoditization: the Business Model Dilemma Confronting Serious Games for Health .....	75
<i>Alasdair G Thin, Giusy Fiucci, Angelo Marco Luccini, Michel Rudnianski, Rosa García Sánchez, and Jannicke Baalsrud Hauge</i>	
IGER: A Game Engine Specifically Tailored to Rehabilitation.....	85
<i>Michele Pirovano, Pier Luca Lanzi, Renato Mainetti, and Nunzio Alberto Borghese</i>	
Designing Games for Children with Cerebral Palsy .....	99
<i>Kristin Guðmundsdóttir, Astrid Lilja Wille, and Alexandru Savu</i>	
The Core Mechanic in <i>Battlefood</i> : A Design Journey .....	117
<i>Josh Whitkin</i>	
Using Vitruvius as a Framework for Applied Game Design .....	131
<i>Micah Hrehovcsik and Lies van Roessel</i>	
'What Remains?': A Persuasive Story Telling Game .....	153
<i>Alessia Cadamuro and Valentijn Visch</i>	

**PROFESSIONAL EDUCATION**

- Serious game based on Clinical cases: A multidisciplinary Approach  
for Self-assessment in Dental Education ..... 163  
*Céline Brunot-Gohin, Alexandre Augéard, André Aoun, and Jean-Yves Plantec*
- A serious game to improve situation awareness in laparoscopic surgery..... 173  
*Maurits Graafland, MD and Marlies P. Schijven, MD PhD MHSc*

**GAMES FOR CARE, CURE AND MEDICINE ADHERENCE**

- Patient follow-up using Serious Games. A feasibility study  
on low back pain patients..... 185  
*Bonnechère B., Jansen B., Omelina L., Da Silva L., Mouraux D., Rooze M.,  
Van Sint Jan S.*
- Designing Kinect games to train motor skills for mixed ability players..... 197  
*Koen de Greef, Erik D. van der Spek & Tilde Bekker*
- Gaming at the dentist's – serious game design for pain  
and discomfort distraction ..... 207  
*Rafael Bidarra, Dien Gambon, Rob Kooij, Dylan Nagel, Maaïke Schutjes,  
Ioanna Tziouvara*

**COGNITIVE AND MENTAL HEALTH**

- A Taxonomy of Serious Games for Dementia ..... 219  
*Simon McCallum and Costas Boletsis*
- BKI: Brain Kinect Interface, a new hybrid BCI for rehabilitation..... 233  
*J. Muñoz, O. Henao, J. F. López, J. F. Villada*
- Development of a theory-based applied game for the treatment  
of Post-Traumatic Stress Disorder: proof of feasibility..... 247  
*Agali Mert, Rudolf Buirma, Justin van Luijk, Gor Melkonian, Joeri Pels  
and Eric Vermetten*

**CHILDREN'S HEALTH**

- DYSL-X: Design of a tablet game for early risk detection of dyslexia  
in preschoolers ..... 257  
*Lieven Van den Audenaeren, Véronique Celis, Vero Vanden Abeele, Luc Geurts,  
JelleHusson, Pol Ghesquière, Jan Wouters, Leen Loyez, Ann Goeleven*
- Playfully Conquering Performance Anxiety..... 267  
*Ralf Schmidt, Patrick Eifler, and Maic Masuch*

Evidence-based psycholinguistic principles to remediate reading problems applied in the playful app *Letterprins*: A perspective of quality of healthcare on learning to read. ....281  
*Esther G. Steenbeek-Planting, Mirella Boot, Jan C. de Boer, Marco van de Ven, Nicole M. Swart, and Dimme van der Hout*

An Active Lifestyle for Youths through Ambient Persuasive Technology. Implementing Activating Concepts in a School Environment.....293  
*R.J.W. Sluis-Thiescheffer; R. Tieben; J. Sturm; M.M. Bekker; B. Schouten*