

2013 IEEE 2nd International Conference on Serious Games and Applications for Health

(SeGAH 2013)

**Algarve, Portugal
2 – 3 May 2013**



**IEEE Catalog Number: CFP13SEG-POD
ISBN: 978-1-4673-6164-4**

TABLE OF CONTENTS

Designing Patient Education and Counseling Practices: Interaction Instead of Procedure Execution	1
<i>Minna Silvennoinen, Antti Pirhonen, Johanna Maksimainen</i>	
Supporting Collective Learning Experiences in Special Education: Development and Pilot Evaluation of an Interactive Learning Tool for Down Syndrome	8
<i>Cátia Afonseca, Sergi Bermúdez I Badia</i>	
ATTAC-L: A Modeling Language for Educational Virtual Scenarios in the Context of Preventing Cyber Bullying	15
<i>Frederik Van Broeckhoven, Olga De Troyer</i>	
Developing a Prototype of an Oncobiology Serious Game for Medical Education	23
<i>Ana C. R. Martins, Frederico G. Freitas, Pedro R. Gonçalves, Rui Prada, Joana M. P. Desterro, L. Costa, M. Inês Crisóstomo</i>	
A Serious Game for EVAcuation Training	29
<i>José Fernando Silva, João Emílio Almeida, Rosaldo J. F. Rossetti, António Leça Coelho</i>	
Leveraging the Learning Process in Health Through Clinical Cases Simulator	35
<i>Cecilia D. Flores, Paulo Barros, Sílvia Cazella, Marta Rosecler Bez</i>	
My Crohn’s Disease on Real Time Information: HCI Improvement for e-Health Interfaces	41
<i>Cláudia Alexandra Pernencar</i>	
From Pixels to Pitches: Unveiling the World of Color for the Blind	48
<i>Sofia Cavaco, Michele Mengucci, J. Tomas Henriques, Nuno Correia, Francisco Medeiros</i>	
Generalized Additive Neural Networks for Mortality Prediction Using Automated and Genetic Algorithms	56
<i>Carlos Bras-Geraldes, Ana Papoila, Patricia Xufre, Fernanda Diamantino</i>	
A Comparative Transformation Model for Process Changes Using Serious Games	64
<i>Martin R. Wolf, Ute Wiese</i>	
eHealth Services for Enhanced Pharmaceutical Care Provision: From Counseling to Patient Education	71
<i>Luís Velez Lapão, João Gregório, Tiago Ferreira, Afonso Cavaco, Christian Lovis, Giuliano Russo, Miguel Mira Da Silva</i>	
A Spacecraft Game Controlled with a Brain-Computer Interface Using SSVEP with Phase Tagging	78
<i>Ricardo Parafita, Gabriel Pires, Urbano Nunes, Miguel Castelo-Branco</i>	
Cognitive Intervention Protocol for Age-related Memory Impairments	84
<i>Ana Maria Portugal, Daniela Silva Ferreira, Joana Santos Reis, Francisco Pinho, Nuno S. Dias</i>	
Healthy Weight Game!: Lose Weight Together—The Design and Evaluation of a Serious Game for Overweight and Obesity	90
<i>S. J. Lentelink, A. A. M. Spil, T. Broens, H. J. Hermens, V. M. Jones</i>	
Public Healthcare System in Macao: Communication Systems in Crisis Situations	98
<i>Sílvia O. S. Ferrão, Elisa Lei Gaspar</i>	
Fostering the NAO Platform as an Elderly Care Robot: First Steps Toward a Low-Cost Off-the-Shelf Solution	106
<i>Jessica P. M. Vital, Micael S. Couceiro, Nuno M. M. Rodrigues, Carlos M. Figueiredo, Nuno M. F. Ferreira</i>	
Palco: A Multisensor Realtime 3D Cartoon Production System	111
<i>Luis Torrao, Sandro F. Queirós, Pedro M. Teixeira, João L. Vilaça, Nuno F. Rodrigues</i>	
An Assistive Tool for Monitoring Physical Activities in Older Adults	117
<i>Pierangelo Dell’Acqua, Leonie Verheijden Klompstra, Tiny Jaarsma, Ali Samini</i>	
Enhancing the Tracking Capabilities of the Microsoft Kinect for Stroke Rehabilitation	123
<i>Luke Shires, Steven Battersby, James Lewis, David Brown, Nasser Sherkat, Penny Standen</i>	
Application for Physiotherapy and Tracking of Patients with Neurological Diseases – Preliminary Studies	131
<i>Tiago Martins, Vítor Carvalho, Filomena Soares</i>	
An Intelligent Game Engine for the At-Home Rehabilitation of Stroke Patients	139
<i>N. Alberto Borghese, Renato Mainetti, Michele Pirovano, Pier Luca Lanzi</i>	
Chances for Serious Games in Rehabilitation of Stroke Patients on the Example of Utilizing the Wii Fit Balance Board	147
<i>René Baranyi, Rainer Willinger, Nadja Lederer, Thomas Grechenig, Wolfgang Schramm</i>	
Active Video Games in Schools to Enhance Children’s Physical Activity: A Randomized Controlled Trial Protocol	154
<i>João Do Carmo, Ricardo Gonçalves, Rui Batalau, José Guilherme, António L. Palmeira</i>	

Exploiting the Development of Robotic Hands: A Survey and Comparison on Different Technologies	158
<i>Ivo M. Sousa, Micael S. Couceiro, Ana R. Barbosa, Carlos M. Figueiredo, Nuno M. F. Ferreira</i>	
Computer Game Engines for Accessibility Assessment: The IST Alameda Campus Case-Study	165
<i>Rita Costa Nascimento, Ana Gil, Teresa Heitor, Ana Tomé, Helena Rua</i>	
Active Video Games and Physical Activity in Overweight Children and Adolescents: Systematic Review	172
<i>João Do Carmo, Ricardo Gonçalves, Rui Batalau, António L. Palmeira</i>	
Author Index	