

2014 IEEE 3rd International Conference on Serious Games and Applications for Health

(SeGAH 2014)

**Rio de Janeiro, Brazil
14-16 May 2014**



**IEEE Catalog Number: CFP14SEG-POD
ISBN: 978-1-4799-4822-2**

TABLE OF CONTENTS

"MINHA SAUDE" A HEALTHCARE SOCIAL NETWORK FOR PATIENTS WITH CARDIOVASCULAR DISEASES	1
<i>Lima-Medina, E. ; Loques, O. ; Mesquita, C.</i>	
SERIOUS GAMES FOR ASSESSMENT AND REHABILITATION OF ANKLE MOVEMENTS	8
<i>Goncalves, A. C. B. F. ; Dos Santos, W. M. ; Consoni, L. J. ; Siqueira, A. A. G.</i>	
SHOULDER FLEXION REHABILITATION IN PATIENTS WITH MONOPARESIA USING AN EXERGAME	14
<i>Castano, J. B. ; Hoyos Escobar, J. D. ; Munoz Cardona, J. E. ; Lopez Herrera, J. F.</i>	
AUTOMATIC ASSESSMENT OF UPPER LIMB FUNCTION DURING PLAY OF THE ACTION VIDEO GAME, CIRCUS CHALLENGE: VALIDITY AND SENSITIVITY TO CHANGE	19
<i>Serradilla, J. ; Shi, J. Q. ; Cheng, Y. ; Morgan, G. ; Lambden, C. ; Eyre, J. A.</i>	
COMFIM: A GAME FOR MULTITOUCH DEVICES TO ENCOURAGE COMMUNICATION BETWEEN PEOPLE WITH AUTISM	26
<i>Ribeiro, P. C. ; Raposo, A. B.</i>	
MAKE YOUR GARDEN GROW: DESIGNING A PHYSICAL ACTIVITY ESTIMATION IMPROVEMENT GAME	34
<i>Amresh, A. ; Small, L.</i>	
DEVELOPMENT OF A COMPLETE GAME BASED SYSTEM FOR PHYSICAL THERAPY WITH KINECT	40
<i>Menezes, R. C., Jr. ; Batista, P. K. A. ; Ramos, A. Q. ; Medeiros, A. F. C.</i>	
JECRIPE: HOW A SERIOUS GAME PROJECT ENCOURAGED STUDIES IN DIFFERENT COMPUTER SCIENCE AREAS	46
<i>Brandao, A. L. ; Fernandes, L. A. F. ; Trevisan, D. ; Clua, E. ; Strickery, D.</i>	
WIRELESS AND WEARABLE EEG ACQUISITION PLATFORM FOR AMBULATORY MONITORING	54
<i>Pinho, F. ; Correia, J. H. ; Sousa, N. J. ; Cerqueira, J. J. ; Dias, N. S.</i>	
HAND-HELD ROBOTIC DEVICE FOR LAPAROSCOPIC SURGERY AND TRAINING	60
<i>Pereira, R. ; Moreira, A. H. J. ; Leite, M. ; Rodrigues, P. L. ; Queirós, S. ; Rodrigues, N. F. ; Leão, P. ; Vilaça, J. L.</i>	
A LIGHTWEIGHT METHOD FOR DETECTING SLEEP-RELATED ACTIVITIES BASED ON LOAD SENSING	68
<i>De Moraes, W. O. ; Wickstrom, N.</i>	
PLANTASMED: A MOBILE APPLICATION TO PROMOTE THE RATIONAL USE OF MEDICINAL PLANTS IN BRAZIL'S COUNTRYSIDE BASED ON PARTICIPATORY HCI DESIGN AND POPULAR EDUCATION FOR HEALTH	75
<i>De Souza, S. B. ; Da Silva, M. M. A. S. ; Rodrigues, R. P. ; Malta, M. E. B. ; De Gusmao, C. M. G. ; Dos Santos, W. P.</i>	
DEVELOPMENT OF A SERIOUS GAME FOR CHILDREN WITH HEMOPHILIA	83
<i>Matsunaga, R. M. ; De Oliveira Moraes, R. L. ; Borges, M. A. F. ; Matta, M. A. P. ; Ozelo, M. C.</i>	
"PLAYING WITH HEALTH" GAME DESIGN METHODOLOGY FOR PUBLIC HEALTH EDUCATION	89
<i>Macedo Dias, C. ; Borges Furlanetti, C. ; Regadas Luiz, J. V. ; Xavier, G.</i>	
ILERA-AIYE: A VIRTUAL WORLD FOR THE DEVELOPMENT OF SERIOUS GAMES FOR HEALTH EDUCATION AND PROMOTION IN THE NORTHEASTERN BRAZILIAN COUNTRYSIDE	97
<i>Da Silva, C. C. ; De Alcantara, B. G. M. ; Olimpio, J. C. S. ; De Gusmao, C. M. G. ; Da Silva Filho, A. G. ; Dos Santos, W. P.</i>	
NUTRITION AT PLAY TECHNOLOGY PROMOTING ALIMENTARY BEHAVIOR MODIFICATION	105
<i>Bahia, A. B. ; Berndt, A. ; Bordignon, G. ; Takase, E.</i>	
REAL-TIME HAND TRACKING FOR REHABILITATION AND CHARACTER ANIMATION	113
<i>Moreira, A. H. J. ; Queirós, S. ; Fonseca, J. ; Rodrigues, P. L. ; Rodrigues, N. F. ; Vilaca, J. L.</i>	
THE MOBILE REHAPP™: AN AR-BASED MOBILE GAME FOR ANKLE SPRAIN REHABILITATION	121
<i>Garcia, J. A. ; Navarro, K. F.</i>	

THE EFFECT OF DIFFERENT DIFFICULTY ADAPTATION STRATEGIES ON ENJOYMENT AND PERFORMANCE IN A SERIOUS GAME FOR MEMORY TRAINING	127
<i>Nagle, A. ; Novak, D. ; Wolf, P. ; Riener, R.</i>	
THE ECONOMIC EFFECTIVENESS OF SERIOUS GAMES IN THE HEALTHCARE ENVIRONMENT - APPLICATION AND EVALUATION OF THE COMPARATIVE TRANSFORMATION MODEL (CTM).....	135
<i>Wolf, M. R. ; Lenz, L. L.</i>	
POSITIVE RELATIONSHIP BETWEEN DURATION OF ACTION VIDEO GAME PLAY AND VISUOSPATIAL EXECUTIVE FUNCTION IN CHILDREN	143
<i>Al-Gabbani, M. ; Morgan, G. ; Eyre, J. A.</i>	
GAMING TO MASTER THE GAME - GAME USABILITY AND GAME MECHANICS	147
<i>Molnar, A. ; Kostkova, P.</i>	
UNCUT: BRIDGING THE GAP FROM PAPER DIARY CARDS TOWARDS MOBILE ELECTRONIC MONITORING SOLUTIONS IN BORDERLINE AND SELF-INJURY.....	154
<i>Lederer, N. ; Grechenig, T. ; Baranyi, R.</i>	
ENVISIONING SECURE AND USABLE ACCESS CONTROL FOR PATIENTS	162
<i>Ferreira, A. ; Lenzi, G. ; Santos-Pereira, C. ; Augusto, A. B. ; Correia, M. E.</i>	
ROBOTIC PLATFORM FOR TELEREHABILITATION STUDIES BASED ON UNITY GAME ENGINE	170
<i>Pires, F. A. ; Santos, W. M. ; De O. Andrade, K. ; Caurin, G. A. P. ; Siqueira, A. A. G.</i>	
VIDEO GAMES AND PARTICIPATION IN HEALTH - HOW ONLINE GAMES CAN FOSTER POPULATION'S PARTICIPATION IN PUBLIC HEALTH POLICIES	176
<i>De Vasconcellos, M. S. ; De Araujo, I. S.</i>	
DESIGN OF A SERIOUS GAME IN TRAINING NON-CLINICAL SKILLS FOR PROFESSIONALS IN HEALTH CARE AREA	184
<i>Guo, J. ; Singer, N. ; Bastide, R.</i>	
HEALTH EMERGENCY EVENT NOTIFICATION SYSTEM, TOWARDS TO THE SEAMLESS SERVICE MOBILITY	190
<i>Beltran, J. A. G. ; Leon, M. C. ; Martínez, A. I. G. ; Hipolito, J. I. N.</i>	
SPATIALLY AWARE MOBILE INTERFACE FOR 3D VISUALIZATION AND INTERACTIVE SURGERY PLANNING	197
<i>Grandi, J. G. ; Maciel, A. ; Debarba, H. G. ; Zanchet, D. J.</i>	
EXPERT USER VALIDATION OF TRANSPLANT MANAGEMENT PROCEDURE SIMULATIONS	205
<i>Borro-Escribano, B. ; Torrente, J. ; Del Blanco, A. ; Fernandez-Manjon, B. ; Martinez-Alpuente, I. ; Matesanz, R.</i>	
THE HISTORY OF EXERGAMES: PROMOTION OF EXERCISE AND ACTIVE LIVING THROUGH BODY INTERACTION.....	213
<i>Finco, M. D. ; Maass, R. W.</i>	
EVALUATION BETWEEN HUMANS AND AFFECTIVE NPC IN DIGITAL GAMING SCENARIO	219
<i>Sales, R. ; Clua, E. ; De Oliveira, D. ; Paes, A. ; Chaimowicz, L. ; Nunes, M. A. S. N.</i>	
A NEW APPROACH FOR SELF ADAPTIVE VIDEO GAME FOR REHABILITATION - EXPERIENCES IN THE AMBLYOPIA TREATMENT	227
<i>Correa, O. ; Cuervo, C. ; Perez, P. C. ; Arias, A.</i>	
DESIGNING GAMES FOR OLDER ADULTS: AN AFFORDANCE BASED APPROACH	232
<i>Awad, M. ; Ferguson, S. ; Craig, C.</i>	
RUMINATION ROOM: A SERIOUS GAME TO DEAL WITH DISTURBING THOUGHTS	239
<i>Oliveira, E. ; Gonçalves, M. M. ; Caridade, R. ; Rodrigues, N.</i>	
HUGO AGAINST DENGUE: A SERIOUS GAME TO EDUCATE PEOPLE ABOUT DENGUE FEVER PREVENTION	244
<i>Porcino, T. M. ; Strauss, E. ; Clua, E. G.</i>	
EDUCATIONAL VIRTUAL GAME SCENARIO GENERATION FOR SERIOUS GAMES	249
<i>Janssens, O. ; Samyny, K. ; Van De Walle, R. ; Van Hoecke, S.</i>	
RECOVERY AND COPING STRESS SUPPORTED BY SERIOUS GAMES	257
<i>De Aquino Lopes, R. ; Junior, E. A. L. ; Cardoso, A. ; Lopes, E. J.</i>	
BODY DOMINANCE DURING VIRTUAL TENNIS GAME: PRELIMINARY RESULTS	264
<i>Gomes, L. G. ; Sovierzoski, M. A. ; Scremin, R. D. ; Gamba, H. R.</i>	
ADAPTIVE ASSISTED MEDICAL DIAGNOSIS SYSTEM FOR MOBILE DEVICES URHEALTH	269
<i>Souza, C. R. S. ; Ribeiro, G. F. ; Rizzini, L. L. ; Martines, T. ; Filgueiras, L. V. L.</i>	
Author Index	