

2012 IEEE International Games Innovation Conference

(IGIC 2012)

**Rochester, New York, USA
7 – 9 September 2012**



**IEEE Catalog Number: CFP12GIC-PRT
ISBN: 978-1-4673-1359-9**

Table of Contents

From Arcades to Apps	1
<i>Seamus Blackley</i>	
What Is Fun?	2
<i>Ian Bogost</i>	
Virtual Worlds and Their Discontents: Who Will Refuse to Enter the Matrix and Why ...	3
<i>Cory Doctorow and Charles Stross</i>	
The Skylanders Story: Successfully Combining Toys and Video Games	4
<i>Paul Reiche</i>	
GamiMUSTication: Transforming Learning to Drive 21st Century Skills	5
<i>Anthony Salcito</i>	
Breaking into the Game Industry	6
<i>Ian Schreiber</i>	
Engaging Interactivity Using Gesture Control Technologies	7
<i>Vincent John Vincent</i>	
Assistive Design and Production in Computer Games: Parametric Systems, Data Mining, Visual Analytic	8
<i>Bardia Aghabeigi, Magy Seif El-Nasr, Thomas Calvert and Mirek Riedewald</i>	
The Game of Life Science: Self-Directed Learning in a Middle School Classroom	12
<i>Gerald Ardito</i>	
Teaching Game AI through Minecraft Mods	17
<i>Jessica Bayliss</i>	
Lazy Eye Shooter: a novel game therapy for visual recovery in adult amblyopia	21
<i>Jessica Bayliss, Indu Vedamurthy, Mor Nahum, Dennis Levi and Daphne Bavelier</i>	
An Online Game of Carrom with Live Video Feed of Coplayer and Face-to-Face: Effect on Strike Response Time	25
<i>Abhishek Bharadwaj and Kavita Vemuri</i>	
Implementing a Game Design Course as a Multiplayer Game	29
<i>Kevin Bierre</i>	
Learning from User Experience in Games	33
<i>Matthias Brandstetter and Samad Ahmadi</i>	
When the games industry and academia collide: What we learn from each other	39
<i>Craig Caldwell, Robert Kessler, Roger Altizer and Mark van Langefeld</i>	
Blaze: A Serious Game for Improving Household Fire Safety Awareness	43
<i>Veronica Cole, Aaron Dechamplain, Eric Rosendale, Ian McCabe, Matthew Stephan and Bill Kapralos</i>	
Gamification of Citizen Sensing through Mobile Social Reporting	47
<i>David Crowley, John Breslin, Peter Corcoran and Karen Young</i>	

RESTful Massively Multi-User Virtual Environments: A Feasibility Study	52
<i>Thomas Debeauvais, Arthur Valadares and Cristina Lopes</i>	
Technical Properties of Play: A Technical Analysis of Significant Properties for Video Game Preservation	56
<i>Adrienne Decker, Christopher Egert, Andrew Phelps and Jerome Mcdonough</i>	
Studying the Past by Playing the Future	60
<i>Christopher Egert, Elizabeth Goins and Andrew Phelps</i>	
Using Open Source Libraries in Cross-platform Game Development	64
<i>Ruairi Fahy and Liam Krewer</i>	
Next Generation E-education: Bringing Fully-Interactive Content Into University Labs Classrooms	69
<i>Imran Haddish</i>	
An Architecture for Game Interaction using Mobile Devices	73
<i>Mark Joselli, Jose Ricardo Da Silva Junior, Eduardo Soluri, Marcelo Zamith, Esteban Chua, Mateus Pelegrino and Evandro Mendonça</i>	
Techniques for Designing GPGPU Games	78
<i>Mark Joselli, Eduardo Soluri, Jose Ricardo Da Silva Junior, Marcelo Zamith, Esteban Chua, Evandro Mendonça and Mateus Pelegrino</i>	
A Course on the Design and Development of Serious Games and Virtual Simulations	83
<i>Bill Kapralos</i>	
Creating Tangible Cultural Learning Opportunities for Indigenous Dance with Motion Detecting Technologies	87
<i>Muqem Khan and Penny de Byl</i>	
Integration of mobile game development into introductory CS courses: lessons learned	90
<i>Stan Kurkovsky</i>	
What's In Your Toy Box: Toolboxes for Learning	94
<i>Steve Kurtz and Nancy Doubleday</i>	
Dynamic Quest Generation in Micro Missions	99
<i>Yana Malysheva</i>	
Video Games as a Medium for Software Education	102
<i>Bradley Marques, Ken Nixon and Stephen Levitt</i>	
The effects of ambient motion speed on player performance in video games	106
<i>Dinara Moura, Magy Seif El-Nasr and Lyn Bartram</i>	
How much sport is in sport games?	111
<i>Joerg Mueller-Lietzkow</i>	
From Exercise to Socialize: Improving Peer Relations in the Fitness Center	116
<i>Daniel Nystrom, Alexander Nalbandian, Matthias Reichenbach and Brian O'Keefe</i>	
Linking In-Game Events and Entities to Social Data on the Web	121
<i>Owen Sacco, Maciej Dabrowski and John Breslin</i>	

Virtual Floortime: Using Games to Engage Children with Autism Spectrum Disorder.....	125
<i>Jeremy Sarachan</i>	
Hidden: The Potential and Pitfalls of Augmented Reality on the Nintendo 3DS.....	129
<i>Emilie Saulnier and Elizabeth McLaren</i>	
Serious Social Games: Designing a Business Simulation Game.....	133
<i>David Schwartz, Steven Gold and Matt Critelli</i>	
Evaluating Martha Madison: Developing Analytical Tools for Understanding the Breadth of Learning Facilitated by STEM Games.....	137
<i>David Simkins, Christopher Egert and Adrienne Decker</i>	
Trust and Play: Productivity Games to Increase Organizational Trust.....	141
<i>Ross Smith</i>	
Achieving Desirable Gameplay Objectives by Niche Evolution of Game Parameters.....	147
<i>Scott Watson, Andrew Vardy and Wolfgang Banzhaf</i>	