## **Table of Contents**

## Long Papers

Christoph Klimmt, Christopher Blake, Dorothée Hefner, Peter Vorderer, and Christian Roth	1
Analysis of Area Revisitation Patterns in World of Warcarft	13
Scaling the Level of Difficulty in Single Player Video Games	<b>2</b> 4
Interfaces and Interactions	
Dance Motion Control of a Humanoid Robot Based on Real-Time Tempo Tracking from Musical Audio Signals	36
Marker-Less Tracking for Multi-layer Authoring in AR Books	48
Personal Space Modeling for Human-Computer Interaction	60
Technology-Enhanced Role-Play for Intercultural Learning Contexts  Mei Yii Lim, Michael Kriegel, Ruth Aylett, Sibylle Enz, Natalie Vannini, Lynne Hall, Paola Rizzo, and Karin Leichtenstern	73
MusicCommentator: Generating Comments Synchronized with Musical Audio Signals by a Joint Probabilistic Model of Acoustic and Textual Features	85
MiniDiver: A Novel Mobile Media Playback Interface for Rich Video Content on an iPhone <sup>TM</sup>	98

Sociology	y of	Games
-----------	------	-------

Children's Choice of Games: The Influence of Prosocial Tendency and Education-Level	110
Vivian Hseuh-Hua Chen, Weirong Lin, Chiew Woon Ng, Su Li Chai, Angeline Cheok Eng Khoo, and Henry Been-Lirn Duh	
Player Experience Evaluation: An Approach Based on the Personal Construct Theory	120
Interactive Storytelling - Interactive Art	
A Plot-Manipulation Algebra to Support Digital Storytelling	132
Distributed Episode Control System for Interactive Narrative	
Entertainment	145
Virtual Noctiluca: Interaction between Light and Water Using Real-Time Fluid Simulation and 3D Motion Measurement	157
Short Papers	
Interactive Sound	
Sound and Movement Visualization in the AR-Jazz Scenario	167
Experimenting with Sound Immersion in an Arts and Crafts Museum $$ Fatima-Zahra Kaghat, Cécile Le Prado, Areti Damala, and Pierre Cubaud	173
BayesianBand: Jam Session System Based on Mutual Prediction by User and System	179
v.morish'09: A Morphing-Based Singing Design Interface for Vocal	
Melodies	185

A Distributed Render Farm System for Animation Production	264
Extending the STRADA Framework to Design an AI for ORTS Laurent Navarro and Vincent Corruble	270
Services in Game Worlds: A Semantic Approach to Improve Object Interaction	276
Posters and Demoonstrations	
Glasses-Free 3D Image Viewer by Handmade DIY Craft	282
Monocular 3D Vision Using Real-Time Generated Scene with Depth of	904
Field Effect	284
RFID Painting Demonstration	286
Development and Evaluation of a Digital Vegetation Interaction Game	200
for Children  Akiko Deguchi, Shigenori Inagaki, Fusako Kusunoki,  Etsuji Yamaguchi, Yoshiaki Takeda, and Masanori Sugimoto	288
4-Views Display System for Collaborative Tasks on Round Table	290
Invisible Two-Dimensional Code Display for Additional Information Tomofumi Yamanari and Kunio Sakamoto	292
MobiSpell: Educational Mobile Game Design and Development for Teaching Spelling to Young Children	295
Live Demonstration of the Pervasive Game "GPS Joker"	297
Rapid Interactive Installation Development Using Robust Computer Vision and Image-Based Rendering	298
Reinforcement Learning for Blackjack	300

Alexandre Topol, and Jérôme Dupire

Sophie Daste and Karleen Groupierre

WHO AM I?: A Art Ludic Installation in Virtual Reality .....

329

## XIV Table of Contents

Affective Interaction: Challenges at the Ubiquitous Computing			
Stephane Gros, Jérôme Dupire, and Stéphane Natkin	331		
Invited Speakers			
You Are Here	333		
Game Experience May Vary: Understanding Play	334		
The New Pact: How Online Worlds Forge a New Form of Alliance between Players and Designers	335		
The International Game Developer Association (IGDA) Education Special Interest Group (EdSIG)	336		
Story of a Video Game Workshop: "Ico," an Interactive Fairy Tale for Children Less Interaction	337		
Japan Arcade Entertainment and It's Technology Yukiharu Sambe	338		
Author Index	339		