Table of Contents

Long Papers

New Interfaces and Entertainment Robots	
Baby Robot "YOTARO" Hiroki Kunimura, Chiyoko Ono, Madoka Hirai, Masatada Muramoto, Wagner Tetsuya Matsuzaki, Toshiaki Uchiyama, Kazuhito Shiratori, and Junichi Hoshino	1
A Card Playing Humanoid for Understanding Socio-emotional Interaction	9
DreamThrower: Creating, Throwing and Catching Dreams for Collaborative Dream Sharing	20
Everyone Can Do Magic: An Interactive Game with Speech and Gesture Recognition	32
User Interfaces	
Onomatopen: Painting Using Onomatopoeia	43
Helping Hands: Designing Video Games with Interpersonal Touch Interaction	55
Cody Watts, Ehud Sharlin, and Peter Woytiuk	
Investigating the Affective Quality of Motion in User Interfaces to Improve User Experience	67
Serious Games and Collaborative Interaction	
The MINWii Project: Renarcissization of Patients Suffering from Alzheimer's Disease Through Video Game-Based Music Therapy Samuel Benveniste, Pierre Jouvelot, and Renaud Péquignot	79
Virtual Team Performance Depends on Distributed Leadership	91



Nonverbal Behavior Observation: Collaborative Gaming Method for Prediction of Conflicts during Long-Term Missions	103
Engaging Autistic Children in Imitation and Turn-Taking Games with Multiagent System of Interactive Lighting Blocks	11
Tools and Networks	
Multiple Page Recognition and Tracking for Augmented Books Kyusung Cho, Jaesang Yoo, Jinki Jung, and Hyun S. Yang	127
Online Scene Modeling for Interactive AR applications	139
Unnecessary Image Pair Detection for a Large Scale Reconstruction Jaekwang Lee and Chang-Joon Park	151
Online Gaming Traffic Generator for Reproducing Gamer Behavior Kwangsik Shin, Jinhyuk Kim, Kangmin Sohn, Changjoon Park, and Sangbang Choi	160
Game Theory and User Studies	
Click or Strike: Realistic versus Standard Game Controls in Violent Video Games and Their Effects on Aggression	171
Logos, Pathos, and Entertainment	183
The Video Cube Puzzle: On Investigating Temporal Coordination Eric Yim, William Joseph Gaudet, and Sid Fels	193
Emotions: The Voice of the Unconscious	205
Short Papers	
Game Theory, User Studies and Story Telling	
Analyzing the Parameters of Prey-Predator Models for Simulation	
Games Seongdong Kim, Christoph Hoffmann, and Varun Ramachandran	216

Table of Contents	XIII
Analyzing Computer Game Narratives	224
Cultural Computing – How Can Technology Contribute the Spiritual Aspect of Our Communication?	232
Interaction and User Experience	
System and Context – On a Discernable Source of Emergent Game Play and the Process-Oriented Method	240
Re-envisioning the Museum Experience: Combining New Technology with Social-Networking	248
Interactive Environments: A Multi-disciplinary Approach towards Developing Real-Time Performative Spaces	254
Explorations in Player Motivations: Virtual Agents Barbaros Bostan	262
Serious Games	
Integration of CityGML and Collada for High-Quality Geographic Data Visualization on the PC and Xbox 360	270
Virtual Blowgun System for Breathing Movement Exercise	278
Development of a Virtual Electric Wheelchair - Simulation and Assessment of Physical Fidelity Using the Unreal Engine 3	286
Event-Based Data Collection Engine for Serious Games	294
Culturally Sensitive Computer Support for Creative Co-authorship of a Sex Education Game	302

Tools and Methods

Lights	308
An Extraction Method of Lip Movement Images from Successive Image Frames in the Speech Activity Extraction Process	317
Rule-Based Camerawork Controller for Automatic Comic Generation from Game Log	326
A Framework for Constructing Entertainment Contents Using Flash and Wearable Sensors	334
Research on Eclipse Based Media Art Authoring Tool for the Media Artist	342
BAAP: A Behavioral Animation Authoring Platform for Emotion Driven 3D Virtual Characters	350
Choshi Design System from 2D Images	358
Player's Model: Criteria for a Gameplay Profile Measure	366
Robots and New Interfaces	
A Laban-Based Approach to Emotional Motion Rendering for Human-Robot Interaction	372
A Biofeedback Game with Physical Actions	383
Dial-Based Game Interface with Multi-modal Feedback	389
Tangible Interactive Art Using Marker Tracking in Front Projection Environment: The Face Cube	397

Chun-Ta Chen, Jy-Huey Lin, Wen-Chun Lin, Fei Wang, and

Robotic Event Extension Experience

Bing-Huan Wu

David Obdrzalek

437

440

443
446
449
452
456
460
1 64
168
172
176
179
182
4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Interactive Manipulation Model of Group of Individual Bodies for VR Cooking System	484
Smile Like Hollywood Star: Face Components as Game Input Jaewook Jung, Hanbit Park, Shin Kang, and Minsoo Hahn	487
Study on an Information Processing Model with Psychological Memory for a Kansei Robot	490
Vegetation Interaction Game: Digital SUGOROKU of Vegetation Succession for Children	493
Penmanship Learning Support System: Feature Extraction for Online Handwritten Characters	496
Development of Wall Amusements Utilizing Gesture Input	499
Study on an Emotion Generation Model for a Robot Using a Chaotic Neural Network	502
Interactive Tabu Search vs. Interactive Genetic Algorithm	505
Instant First-Person Posture Estimation	508
Monitoring User's Brain Activity for a Virtual Coach	511
Developing Educational and Entertaining Virtual Humans Using Elckerlyc	514
Author Indov	510