

Jiming Liu Pong C. Yuen Chun-hung Li
Joseph Ng Toru Ishida (Eds.)

Active Media Technology

6th International Computer Science Conference, AMT 2001
Hong Kong, China, December 18-20, 2001
Proceedings



Springer

Table of Contents

Keynote Presentations

Intelligent Adaptive Interface	1
<i>Toshio Fukuda</i>	
Digital City: Bridging Technologies and Humans	2
<i>Toru Ishida</i>	
Detection, Recognition, and Expression Analysis of Human Faces	3
<i>Takeo Kanade</i>	
Digital Interactivity: Human-Centered Robotics, Haptics, and Simulation	4
<i>Oussama Khatib</i>	

I. Smart Digital Media

Smart Media: Empower Media with Active Data Hiding	5
<i>Hong Heather Yu, Peng Yin, Samuel Cheng, Xiangyang Kong, Alexander Gelman, Robert S. Fish</i>	
Congestion Prospect of Network Traffics by Fluctuation of Internet Transmission Time.	17
<i>Hiroto Takahashi, Yasuo Yonezawa</i>	
Naturalistic Human-Robot Collaboration Mediated by Shared Communicational Modality in Teleoperation System	24
<i>Yukio Horiguchi, Tetsuo Sawaragi</i>	

II. Web Personalization

Web Personalization Techniques for E-commerce	36
<i>Suwimol Sae-Tang, Vatcharaporn Esichaikul</i>	
A Shopping Negotiation Agent That Adapts to User Preferences	45
<i>Runhe Huang, Jianhua Ma, Qun Jin</i>	
Combining Meta-level and Logic-Based Constructs in Web Personalization	57
<i>Sofie Goderis, Gustavo Rossi, Andres Fortier, Juan Cappi, Daniel Schwabe</i>	
Web Personalisation - An Overview.	65
<i>San Murugesan, Annamalai Ramanathan</i>	
Business-Oriented Web Personalization: A Decision-Making Approach	77
<i>Carlos Alberto Odorico de Moraes Filho, Francilene Procpio Garcia</i>	

A Personalized Interface Agent with Feedback Evaluation. 83
Weihua Li, Xiaodong Fu

III. Active Interfaces

VHML - Directing a Talking Head 90
Andrew Marriott, Simon Beard, John Stallo, Quoc Huynh

Believable and Interactive Talking Heads for Websites: MetaFace
and MPEG-4. 101
Simon Beard, Donald Reid, Russel Shepherdson

Building Multi-modal Personal Sales Agents as Interfaces
to E-commerce Applications. 113
Yasmine Arafa, Abe Mamdani

Feature vs. Model Based Vocal Tract Length Normalization for a Speech
Recognition-Based Interactive Toy. 134
Chun Keung Chau, Chak Shun Lai, Bertram Emil Shi

A Genetic Algorithm Based Approach to the Synthesis
of Three Dimensional Morphing Sequences. 144
Stephen Wang-Cheung Lam, Kelvin Yuen-Hin Ho

IV. Autonomous Agent Approaches

A Comparative Study of ANT-Based Optimization for Dynamic Routing. . 153
Kwang Mong Sim, Weng Hong Sun

What Kind of Cooperation Is Required by Situated Agents? (The Principle
of Situated Cooperation). 165
Angelica Munoz-Melendez, Alexis Drogoul

A Fault-Tolerant Scheme of Multi-agent System for Worker Agents. 171
YunHee Kang, HoSang Ham, ChongSun Hwang

Decentralized Control of Multi-agent Systems Based on Modal Logics and
Extended Higher Order Petri Nets. 182
Osamu Katai, Kentaro Toda, Hiroshi Kawakami

V. Facial Image Processing

An Improved Foreground Extraction Approach 191
Erdan Gu, Duanqing Xu, Chun Chen

Object Detection Simulating Visual Attention. 199
Xingshan Li, Chunwei Yuan

Fast Face Detection Using Neural Networks and Image Decomposition 205
Hazem M. El-Bakry

Modeling of Facial Expressions Using NURBS Curves.	216
<i>Ding Huang, Wei Lin, Hong Yan</i>	
VI. AMT-Supported Commerce, Business, Learning, and Health Care	
Evolutionary Negotiation in Agent-Mediated Commerce.	224
<i>Samuel P.M. Choi, Jiming Liu, Sheung-Ping Chan</i>	
Optimizing Agent-Based Negotiations with Branch-and-Bound.	235
<i>Andy Hon Wai Chun, Rebecca Y.M. Wong</i>	
Engineering Fuzzy Constraint Satisfaction Agents for Multi-user Timetable Scheduling.	244
<i>Chi Kin Chau, Kwang Mong Sim</i>	
An XML-Based Distance Learning System Capable of Conveying Information on "LECTURE EVENT".	255
<i>Naoaki Mashita, Hiroshi Shigeno, Yutaka Matsushita</i>	
An Authoring Tool for Building Adaptive Learning Guidance Systems on the Web.	268
<i>Jose A. Macias, Pablo Castells</i>	
A Framework of Caring Interaction by a Network Model of Client's Concepts Based on a Nursing Theory and Naive Psychological Approaches.	279
<i>Akira Notsu, Osamu Katai, Hiroshi Kawakami</i>	
VII. Tools and Techniques	
Parallel Design Based on Neural Network.	291
<i>Shaobai Zhang, Xiefeng Cheng, Zhiquan Feng</i>	
Fair Play Protocol.	297
<i>Tak-Ming Law</i>	
Collaborative Filtering Methods for Binary Market Basket Data Analysis.	302
<i>Andreas Mild, Thomas Reutterer</i>	
An Implementation and Design of COMOR System for OOM Reuse.	314
<i>Young-Jun Kim</i>	
Automatic Aircraft Recognition Using Maximum Likelihood Ratio Test ...	321
<i>Wei Yi</i>	

VIII. Algorithms

A Machine Learning Algorithm Based on Supervised Clustering and Classification	327
<i>Nong Ye, Xiangyang Li</i>	
Visualization of a Parallel Genetic Algorithm in Real Time.	335
<i>Xiaodong Li</i>	
The Rise and Fall of Napster - An Evolutionary Approach.	347
<i>Bengt Carlsson, Rune Gustavsson</i>	
On the Elaboration of Hand-Drawn Sketches.	355
<i>Saul Simhon, Gregory Dudek</i>	
The Introduction of Three Methods Generating Stereoscopic Image.	365
<i>Guoying Zhao, Xinyuan Huang</i>	
Kansei-Oriented Image Retrieval.	377
<i>Shangfei Wang, Enhong Chen, Jing Hu and Xufa Wang</i>	
ICSPACE - An Internet Cultural Space.	389
<i>T.A. Tavares, A.S. Araujo, G.L. Souza Filho</i>	
Author Index.	401