

Table of Contents

Foreword	iii
-----------------------	------------

Conference Organization	iv
--------------------------------------	-----------

Keynote

Industry Multimedia Projects

<i>Borko Furht</i>	xv
--------------------------	-----------

Slow Intelligence Systems

Relating Slow Intelligence Research to Bilingualism

<i>Tiansi Dong and Ingo Glöckner.....</i>	3
---	----------

Design and Implementation of Image Analysis System by Applying Component-based Slow Intelligence System Framework

<i>Liqun Kuang, Shi-Kuo Chang, Yingze Wang and Yao Sun</i>	9
--	----------

A Framework for Intrusion Detection System based on the Slow Intelligent Approach

<i>Francesco Colace, Massimo De Santo, Salvatore Ferrandino and S.K. Chang</i>	17
--	-----------

Cloud Services for Medical Image Processing: Application of Service Science and Slow Intelligence Systems (S)

<i>Kang-Lin Peng, Shi-Kuo Chang, Yu-Chee Tseng and Thomas M. Deserno.....</i>	25
---	-----------

A Slow Intelligence Framework for Human Behavior Recognition Using Wearable Cameras (S)

<i>Wen-Hui Chen and Shi-Kuo Chang</i>	29
---	-----------

Mobile Intelligent Application

Mobile Recommended System on Android Platform

<i>S. Impedovo, IAPR Fellow, IEEE S. M. and P. Campanella</i>	33
---	-----------

Development of A Real-Time Air Pollution Alert System Using Smart Phones (S) <i>Nuri Yilmazer, Young Lee, Juan Mora, William Webb and Kuo-Jen Liao</i>	39
---	----

Human-Computer Interaction

Sharing Digital and Physical Contents on and above Distributed Surfaces using Active Infrared Keying <i>Buntarou Shizuki, Yuichi Murata and Jiro Tanaka</i>	42
--	----

Fuzzy Color Space Segmentation to Identify the Same Dominant Colors as Users <i>José C. Amante and Manuel J. Fonseca</i>	48
---	----

<i>Insights on the development of visual tools for analysis of pollution data</i> <i>Paolo Buono and Maria Francesca Costabile</i>	54
---	----

Semantic Computing and Processing

Ontological Filtering for Sentiment Analysis <i>Francesco Colace, Massimo De Santo, Paolo Napoletano, C. Becchi and S.K. Chang</i>	60
---	----

Efficient Computation of Object Boundary Intersection and Error Tolerance in VRCC-3D+ (S) <i>Nathan Eloë, Jennifer Leopold, Chaman Sabharwal and Zhaozheng Yin</i>	67
---	----

Determining Minimal Transitions Between VRCC-3D+ Relations (S) <i>Adaleigh Martin, Ian Kottman, Robyn Littleton, Jennifer Leopold, Chaman Sabharwal and Nathan Eloë</i>	71
--	----

Cultural and Social Multimedia

EEG-Based BCI Data Analysis on Visual-Perceptual Priming in the Context of a Museum of Fine (S) <i>Annalisa Banzi and Raffaella Folgieri</i>	75
---	----

Use of large multi-touch screens for informal learning (S) <i>Rosa Lanzilotti and Maria Francesca Costabile</i>	79
--	----

Software Engineering and Software Security

Software Product Line Evaluation: Categorization and Evolution over the Years <i>Edson A. Oliveira Junior, Itana M. S. Gimenes and José C. Maldonado</i>	83
Variability Management in Software Product Line Activity Diagrams <i>Diego R. Fiori, Itana M. S. Gimenes, José C. Maldonado and Edson A. Oliveira Junior</i>	89
Improving the identification of traceability links between source code and requirements <i>Daniel Hanspeter, Andrea Janes, Alberto Sillitti and Giancarlo Succi</i>	95

Intelligent Multimedia Computing

An Integrated Architecture for Multiagent Virtual Worlds for Performing Adaptive Testing Games <i>Sandeep Virwaney, Fuhua Lin, Grant McClure and Robert Heller</i>	101
Optimal resources utilization for indexing within a distributed multimedia retrieval system: an implementation for a video surveillance use case <i>Dana Codreanu, Ana-Maria Manzat and Florence Sedes</i>	107
Functionalities and Flow Analyses of Knowledge Oriented Web Portals <i>Daniele Cenni, Paolo Nesi and Michela Paolucci</i>	113

Artificial Intelligence Approaches to Software Engineering

Enhanced Fuzzy Multiple Regression Neural Model for Software Effort Estimation (S) <i>Khaled Mohamed Shams, Dr. Amr Kamel</i>	119
Automating UML Sequence Diagram Generation by Treating it as a Planning Problem <i>Yaser Sulaiman and Moataz Ahmed</i>	124
Knowledge Management to Support the Use of Agile Methodologies (S) <i>Jordão E. and Furtado F.</i>	130

DET Workshop

Evolution of Learning Environments

An educational game to learn type 1 diabetes management

Pierpaolo Di Bitonto, Teresa Roselli, Veronica Rossano, Elda Frezza and Elvira Piccinno.... 139

Building Wider Team Cooperation Projects from Lessons Learned in Open Communities of Practice

Paolo Maresca, Angela Guercio and Lidia Stanganelli 144

e-Learning Applications: medicine & mobility

Information systems and e-Learning platforms: from loose coupling to deep integration

Luigi Colazzo and Andrea Molinari..... 150

Revisiting design of learning and mobility services

Bruno Apolloni, Raffaella Folgieri and Giorgio Valle 155

Blended learning in Continuing Medical Education (S)

Francesco Epifania..... 161

Monetary System Recognition based on Windows Mobile (S)

S. Impedovo, IAPR Fellow, IEEE S. M. and P. Campanella 165

VLC Workshop

Visual Languages and Computing

DEViL3D – A Generator Framework for Three-Dimensional Visual Languages

Jan Wolter..... 171

Semi-Automated Generation of Domain-Specific, Natural Language-Based, Visual Programming Languages (S)

Michael Wisely and Jennifer L. Leopold 177

Formalizing the Syntax of Codecharts (S) <i>Jon Nicholson, Aidan Delaney and Gem Stapleton</i>	181
Does the Orientation of an Euler Diagram Affect User Comprehension? <i>Andrew Blake, Gem Stapleton, Peter Rodgers, Liz Cheek and John Howse</i>	185
A Video Game to Learn KeyScrech (S) <i>Gennaro Costagliola, Mattia De Rosa, Vittorio Fuccella and Fabrizio Torre</i>	191

Poster/Demo: Multimedia Arts & DMS/VLC Demos

Semi-automatic requirement tracing in modified code: An Eclipse Plugin (P) <i>Daniel Hanspeter, Andrea Janes, Alberto Sillitti and Giancarlo Succi</i>	A-3
An Interactive Learning and Assessment System for Simulation-based Science Education Using Cloud Computing Technology (P) <i>Mengxia (Michelle) Zhu and Frackson Mumba</i>	A-5
Reviewer’s Index	A-6
Author’s Index	A-8
Poster/Demo Presenter’s Index	A-10

Note: (S) indicates a short paper.

(P) indicates a poster or demo, which is not a refereed paper.