ADVANCES in VISUALIZATION, IMAGING and SIMULATION

3rd WSEAS International Conference on VISUALIZATION, IMAGING and SIMULATION (VIS '10)

University of Algarve, Faro, Portugal
November 3-5, 2010
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Preface
This year the 3rd WSEAS International Conference on VISUALIZATION, IMAGING and SIMULATION (VIS '10) was held at the University of Algarve, Faro, Portugal, November 3-5, 2010. The conference remains faithful to its original idea of providing a platform to discuss imaging sensors, color and texture analysis, motion and tracking, stereo vision, biometrics recognition, machine learning, image manipulation and compression, medical imaging, motion analysis, cognitive vision, face and gesture recognition, scientific and mathematical visualization, multiresolution techniques, signal segmentation, visual inspection, human computer interaction and communication, numerical grid generation, eigenvalue problems, optimization, systems and control, fluid mechanics, heuristic algorithms, cryptology, undersea systems etc. with participants from all over the world, both from academia and from industry.

Its success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The accepted papers of this conference are published in this Book that will be indexed by ISI. Please, check it: www.worldses.org/indexes as well as in the CD-ROM Proceedings. They will be also available in the E-Library of the WSEAS. The best papers will be also promoted in many Journals for further evaluation.

A Conference such as this can only succeed as a team effort, so the Editors want to thank the International Scientific Committee and the Reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

The Editors
# Table of Contents

- **Plenary Lecture 1: Distributed Simulation Environment Access**  
  Egils Ginters  
  Page 11

- **Plenary Lecture 2: Some Relevant Aspects of Developing a Customized Remote Control System**  
  Mihaiela Iliescu  
  Page 12

- **Improving the Accuracy of Visual Odometry from Point Features**  
  Aldo Cumani  
  Page 13

- **BAS2, an In-House Developed Stand Alone GIS Application for the Estimation of Burned Area Statistics**  
  Ioannis Z. Gitas, Thomas Katagis, Anastasia Polychronaki, Marcel Mateescu  
  Page 18

- **Fast Frame Decomposition and Sorting by Contour Tracing for Mobile Phone Comic Images**  
  Yusuke In, Takashi Oie, Masakazu Higuchi, Shuji Kawasaki, Atushi Koike, Hitomi Murakami  
  Page 23

- **Some Relevant Aspects of Developing a Customized Remote Control System**  
  Iliescu M., Dumitrescu D., Velea G., Comanescu B.  
  Page 29

- **Developing an Innovative System for Skates**  
  Iliescu M., Tiganu I., Boboc D., Ploscan C.  
  Page 35

- **3D FEM Analysis of Cutting Processes**  
  Corina Constantin, Sorin Mihai Croitoru, George Constantin, Claudiu Florinel Bisu  
  Page 41

- **A Visual Language Framework for Music Rendering Using L-System**  
  Lim Chen Kim, Abdullah Zawawi Talib  
  Page 47

- **SSIM Image Quality Metric for Denoised Images**  
  Peter Ndajah, Hisakazu Kikuchi, Masahiro Yukawa, Hidenori Watanabe, Shogo Muramatsu  
  Page 53

- **Agent and Mobile Technologies and Their Usage in Development of Learning Environment Supportive System**  
  Kaspars Osis, Janis Grundspenkis  
  Page 58

- **Boundary-Based Depth Image Improvement**  
  Yang-Keun Ahn, Young-Choong Park, Kwang-Soon Choi, Kwang-Mo Jung, Ji-Man Hong  
  Page 64

- **Measurement of Eye Reaction and Eyelid Movement**  
  Frantisek Racek, Teodor Balaz, Jan Komenda  
  Page 70

- **3D Visualization Framework Based on MVC for In-Situ OLAP Knowledge/Information Interpretation**  
  Sung Gook Kim, Kyeong Deok Woo, Beom Seok Lee, Kyoung Il Kang, Cheolwhan Lee, Sung Kyun Lee, Sung Wook Baik  
  Page 76
Shadow Image and Special Effects Implementation Techniques for Virtual Shadow Puppet Play
Tan Kian Lam, Abdullah Zawawi Talib

Application of Enterprise Modeling Method for Continuing Education Design and Development
Ginta Stale, Sarma Cakula

Robotics Tools for Constructing Stereo Systems Using off-the-Shelf Cameras
Vitaliy Rybak, Ismael De J. Perez V.

Event-Based Semantic Visualization of Trajectory Data in Urban City with a Space-Time Cube
Chen Zhong, Chamseddine Zaki, Vincent Tourre, Guillaume Moreau

Easy Communication Approach for Data Exchange in Distributed Simulation Environment
Artis Silins, Egils Ginters, Dace Aizstrauta, Juris Binde

Performance Evaluation of Visual Cryptography Schemes with Intensity Transformations for Gray-Scale Images
Masakazu Higuchi, Shuji Kawasaki, Jonah Gamba, Atsushi Koike, Hitomi Murakami, Aya Emori

Measurement of Ultrasound Attenuation for Normal and Pathological Mice Breast Tissue using 10MHz Ultrasound wave
Maheza Irna Mohamad Salim, Mohammad Azizi Tumiran, Siti Nor Zawani Ahmmad, Ismail Ariffin, Abdul Hamid Ahmad, Bustanur Rosidi, Eko Supriyanto

Personalized Expressive Embodied Conversational Agent EVA
Izidor Mlakar, Matej Rojc

A Study About Daylight Perception by the Human Eye
Toader Florin, Radu Arsinte, Nikos E. Mastorakis

Visualization Methods in Emergency Medical Services Readiness Evaluation
Bruno Jezek, Jan Vanek, Karel Antos

Urban Environment Quality Indicators: Application to Solar Radiation and Morphological Analysis on Built Area
Claudio Carneiro, Eugenio Morello, Gilles Desthieux, Francois Golay

Geographic Information System for Railway Management
Hazem M. El-Bakry, Wael A. Awad

Authors Index
Plenary Lecture 1

Distributed Simulation Environment Access

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Abstract: Nowadays the decision making becomes very difficult and risky process due to complexity of the sociotechnical systems, which are information capacious. Due to the reasons mentioned above topical are the requirements for situations forecasting before the decision making. For solving the problems mentioned above the varied simulation tools and environments are used. Unfortunately some serious problems still exist related with standards compatibility, formats harmonization, concepts consistency and access. Today does not possible to design highly functional distributed simulation models without the specific knowledge in programming, therefore common access to the models created before in different industries and environments are still limited for IT non-professionals. The aim of the report is to clarify the situation and to offer some ways how to solve the problems related with distributed simulation access.

Plenary Lecture 2

Some Relevant Aspects of Developing a Customized Remote Control System

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Abstract: Developing a customized product requires thorough analysis of the problems involved, so that performances and efficiency could be stated. This paper presents the way computer aided technologies, dealing with modeling, simulation (by SolidWorks and Autodesk Inventor) and rapid prototyping (by Ink Jet 3D printing), were applied and used so as to a check, to determine, to improve and correct the possible design errors of a remote control system's components.

Brief Biography of the Speaker: Has graduated in 1989, "POLITEHNICA" Institute of Bucharest, ROMANIA and in 1989 – 1991 worked as an engineer – in the Design Department of a Romanian peripheral equipment factory, FEPER
Since 1991 has been working, as a teacher in "POLITEHNICA" University of Bucharest, ROMANIA – Manufacturing Department, in 2004, being Associate professor. The Doctoral Thesis, in 2000 – was on Quality and Machinability of Thermal Sprayed Layers.
Teaches courses and works into the fields of: Applied Statistics for Engineers; Metal Forming; Manufacturing Technologies; Injection Moulding, being scientific researcher, in about 30 Research Projects and Grants. First-author or, co-author, of about 95 studies and papers - published to International/National Conferences, Sessions, Workshops, Platform Meetings etc; of 12 books on Statistics, Manufacturing Technology, Geometrical Precision Inspection. Member of some professional associations, as Plastics Industry Producers Association – ASPAPLAST, ROMANIA, Rapid Manufacturing Association – RAPIMAN; has some international awards as: Best Innovation Award - at Brussels INNOVA Fair, 2007. Golden Medal – in INVENTIKA –2008, Bucharest, Romania.
Has papers presented in WSEAS Conferences, in 2008, 2009 and, also published in WSEAS Journals. Was invited Plenary Speaker in WSEAS Conferences, like Venice – November, 2008; Cambridge – February, 2009; Baltimore – November 2010. Has performed organizing activities for WSEAS Conferences in Bucharest, in June and, specially, in November, 2008 – when was General Chairman.