

# IADIS International Conference Applied Computing 2008

## FINAL CONFERENCE PROGRAM

**Thursday 10<sup>th</sup>, April 2008**

**08:30-19:30 Welcome Desk**

**09:45-10:00 Session O – Opening Session  
(Room Carvoeiro)**

**OPENING SESSION**

*Prof. Pedro Isaías*

**10:00-11:00 Session KL1 – Keynote Presentation  
(Room Carvoeiro)**

**AGENT-BASED VIRTUAL ORGANIZATION**

*Professor Marcin Paprzycki, Systems Research Institute, Polish Academy of Science, Warsaw, Poland*

**11:00-11:30 Coffee Break**

**11:30-13:10 Session FSP 10.1**

**Security**

**(Room Carvoeiro)**

**SECURITY MECHANISMS OF A LEGAL PEER-TO-PEER FILE SHARING SYSTEM (F102)**

*Peter Ebinger, Sebastian Schinzel and Martin Schmucker*

**XML REWRITING ATTACKS: EXISTING SOLUTIONS AND THEIR LIMITATIONS (F165)**

*Azzedine Benameur, Faisal Abdul Kadir and Serge Fenet*

**SISBLOQUE: A PROPOSAL OF A WEB CONTENT FILTERING AND BLOCKING SYSTEM (S046)**

*Filipe Pires, Alexandre Fonte and Vasco Soares*

**ON SECURITY USING SIMPLE TECHNOLOGICAL FRAMEWORK FOR TRUST RELATIONS WITHIN WEB SERVICES (S145)**

*Sylvia Encheva and Sharil Tumin*

**11:30-12:50 Session FSP 10.2**

**Visualization // Virtual Reality**

**(Room Alfanizina)**

**IMPROVED 3D SCAN VIEW REGISTRATION USING 6D SCENE DIFFERENTIALS (F030)**

*Joris Vergeest and Yu Song*

**EDUCATIONAL INTERACTIVE MODELS USED TO SIMULATE CONSTRUCTION ACTIVITIES (F073)**

*Alcnia Zita Sampaio and Pedro G. Henriques*

**AUGMENTED REALITY-BASED BEHAVIOR-ANALYSIS OF AUTONOMOUS SOCCER ROBOTS (S166)**

*Rafael Radkowski, Willi Richert, Henning Zabel and Philipp Adelt*

**13:00-14:30 Lunch Break**

**14:30-16:20 Session FSP 10.3**

**Database Systems**

**(Room Carvoeiro)**

**ADAPTIVE STORAGE MODEL FOR XML IN OBJECT-RELATIONAL DATABASES (F022)**

*Michael Kamel, Khaled Nagi and Nagwa El-Makky*

**EVALUATION OF EFFICIENT B-TREE PROCESSING USING A FUNCTIONAL MEMORY SYSTEM (F039)**

*Jun Miyazaki*

**EQUI JOIN QUERY ACCELERATION USING ALGEBRAIC SIGNATURES (F107)**

*Riad Mokadem, Abdelkader Hameurlain and Franck Morvan*

**TOWARDS DATABASE PERFORMANCE PATTERNS (S092)**

*A.T.M. Aerts, W.T van de Molengraft and J. Snijders*

**16:30-17:00 Coffee Break**

**17:00-18:50 Session FSP 10.4**

**Software Engineering**

**(Room Carvoeiro)**

**USING XSL TRANSFORMATIONS FOR JAVA CODE GENERATION OF ASN.1 DATA STRUCTURES (F066)**

*Frank Lautenschlger and Peter Ebinger*

**VIEW-BASED PRIVACY MODEL FOR OBJECT SYSTEMS (F171)**

*Hamid Mcheick, Hafedh Mili and Eric Dallaire*

**SOME TEST SELECTION CRITERIA FOR TIMED INPUT OUTPUT AUTOMATA SPECIFICATIONS (F072)**

*Abdeslam En-Nouary and Abdelghani Benharref*

**AN ORDINAL METRIC FOR INTRA-METHOD CLASS COHESION (S054)**

*Frank Tsui, Challa Bonja, Sheryl Duggins and Orlando Karam*

## Friday 11<sup>th</sup>, April 2008

08:30-16:30 Welcome Desk

09:00-10:50 Session FSP 11.1

Wireless Applications // Usability Issues  
(Room Porches)

**A MOBILE THERAPY FRAMEWORK: MULTI MODAL EXTENSIONS & USAGE EXAMPLES (F065)**  
*Tiago Reis, Marco de Sá, Luís Duarte and Luís Carriço*  
**JXTA BASED FILE SHARING OVER MOBILE AD-HOC NETWORKS USING SHARED ADVERTISING (F069)**  
*M. Angelaccio, B. Buttarazzi and D. Pizziconi*  
**DISTRIBUTED ROLE-BASED MODELING (F151)**  
*Sylvia Encheva and Sharil Tumin*  
**COMMUNICATION, COOPERATION AND COORDINATION IN AN AD-HOC ENVIRONMENT (S160)**  
*Diego Casado Mansilla, Andrés Navarro Guillén and Juan R. Velasco*

10:00-11:00 POSTER SESSION

(Room Bogarts 1)

**DISCRETE PARTICLE SWARM OPTIMIZATION: REALITY OR FANTASY? (P041)**  
*Julia Ann Johnson and Jose Saavedra Rosas*  
**NON-DETERMINISTIC PREDICTION (P042)**  
*Julia Johnson*  
**GRID COMPUTING ENABLED IDENTIFICATION OF ACTIVE MOLECULES AGAINST TARGETS IMPLICATED IN MALARIA (P094)**  
*Ana Lucia da Costa, Vinod Kasam, Jean Salzemann, Vincent Bloch, Gianluca Degliesposti, Giulio Rastelli, Hee Young Kang, Doman Kim, Nadia Saidani, Eric Marechal, Astrid Maas and Vincent Breton*

11:00-11:30 Coffee Break

11:30-13:00 Session FP 11.2

Bioinformatics  
(Room Lagoa)

**BIOLOGICAL COMPLEXITY IN THE AGENT WORLD (F050)**  
*Sathish Periyasamy, Peter Kille and Alex Gray*  
**ASSESSMENT OF GENE ONTOLOGY BASED RECOGNITION OF RELATED PROTEINS (F129)**  
*Fernando Garcia, Luis Adarve, Francisco J. Lopez and Armando Blanco*  
**ACCURATE PROFILING AND ACCELERATION EVALUATION OF THE SMITH-WATERMAN ALGORITHM USING THE MOLEN PLATFORM (F149)**  
*Laiq Hasan and Zaid Al-Ars*

13:00-14:30 Lunch Break

14:30-16:10 Session FSP 11.3

Information Retrieval  
(Room Alfanzina)

**EFFICIENT PAGE-LEVEL INFORMATION RETRIEVAL FOR COMPRESSED READABLE DOCUMENTS (F024)**  
*Mohsen Madi and Abdelaziz Fellah*  
**FREQUENT CASE FORM GENERATION OF QUERY KEYWORDS IN TEXT RETRIEVAL (F043)**  
*Kimmo Kettunen*  
**RECOGNITION OF VIDEO SIGNAL BY MATCHING WITH THE ORIGINAL VIDEO SEQUENCE (S108)**  
*Åhlén Julia and Sundgren David*  
**EMAIL CLASSIFICATION USING RBF NETWORKS (S117)**  
*Eric Jiang*

16:30 Conference Tour and Dinner

## Saturday 12<sup>th</sup>, April 2008

08:30-19:30 Welcome Desk

09:00-11:00 Session FSP 12.1

Intelligent Systems // Agent Systems and Applications  
(Room Alfanzina)

**SENSOR BASED CONDITION MONITORING USING A SELF-ORGANIZING SPIKING NEURAL NETWORKS MAP (F140)**  
*Rui G. Silva*  
**SATISFYING SOME REQUIREMENTS IN COMPUTER PROGRAMS FOR STORY UNDERSTANDING (F130)**  
*David Ramamonjisoa*  
**INFERENCE RULES BASED ON CONCEPTUAL GRAPHS FOR ANALYSIS OF ECONOMIC ENVIRONMENT (S132)**  
*Maria Antonina Mach*  
**SOFTWARE AGENT TECHNOLOGY SUPPORTING RISK MANAGEMENT IN SPM (S154)**  
*Nienaber RC, Smith E and Barnard A.*  
**ALTERNATIVE WAY FOR SOLVING KNOWLEDGE REPRESENTATION PROBLEMS (S158)**  
*Sylvia Encheva and Sharil Tumin*

09:00-11:00 Session FSP 12.2

Algorithms  
(Room Porches)

**A HYBRID DIFFERENTIAL EVOLUTION ALGORITHM FOR SOLVING THE FREQUENCY ASSIGNMENT PROBLEM (F095)**  
*Anabela Moreira Bernardino, Eugénia Moreira Bernardino, Juan M. Sánchez Pérez, Juan A. Gómez Pulido and Miguel A. Vega Rodríguez*  
**PARALLEL DOUBLE DIVIDE AND CONQUER AND ITS EVALUATION ON A MULTI-CORE COMPUTER (F118)**  
*Taro Konda, Hiroki Toyokawa and Yoshimasa Nakamura*  
**TABU SEARCH VS HYBRID GENETIC ALGORITHM TO SOLVE THE TERMINAL ASSIGNMENT PROBLEM (S163)**  
*Eugénia Moreira Bernardino, Anabela Moreira Bernardino, Juan M. Sánchez-Pérez, Juan A. Gómez-Pulido and Miguel A. Vega-Rodríguez*  
**A STABILIZING ALGORITHM FOR FINDING ALL NODE-DISJOINT PATHS IN STAR NETWORKS (S137)**  
*Ahmad M. Hammad and Mehmet Hakan Karaata*  
**A GENETIC ALGORITHM WITH MULTIPLE OPERATORS FOR SOLVING THE RING LOADING PROBLEM (S164)**  
*Anabela Moreira Bernardino, Eugénia Moreira Bernardino, Juan M. Sánchez-Pérez, Juan A. Gómez-Pulido and Miguel A. Vega-Rodríguez*

11:00-11:30 Coffee Break

11:30-12:50 Session FSP 12.3  
Storage Issues // Semantic Web  
(Room Alfanfina)

**FAST FLASH MEMORY CACHING BASED ON FILE ACCESS FREQUENCY (F173)**  
*ChenHan Liao, Frank Wang, Na Helian, Sining Wu and YuHui Deng*

**A PROTÉGÉ PLUGIN FOR STORING OWL ONTOLOGIES IN RELATIONAL DATABASES (F097)**  
*María del Mar Roldán-García and José F. Aldana-Montes*

**ALTERNATIVE SERVICE IDENTIFICATION AND DECOMPOSITION OF IT SERVICES USING ONTOLOGIES (S115)**  
*Christian Bartsch, Larisa Shwartz, Christopher Ward, Genady Grabarnik and Melissa J. Buco*

11:30-13:10 Session FSP 12.4  
Applied Information Systems // Other  
(Room Bogarts 1)

**UNBBAYES-MEBN: COMMENTS ON IMPLEMENTING A PROBABILISTIC ONTOLOGY TOOL (F057)**  
*Rommel N. Carvalho, Marcelo Ladeira, Laécio L. Santos, Shou Matsumoto and Paulo C. G. Costa*

**THE IMPLANTATION OF THE AGILE PROCESS SCRUM IN CLAY FORMACION INTERNACIONAL (F157)**  
*Javier Holguera Blanco, Carlos Muñoz Martín, Miguel Ángel Conde González and Francisco J. García Peñalvo*

**INTEGRATING OPC DATA INTO GSN INFRASTRUCTURES (S047)**  
*Olivier Passalacqua, Eric Benoit, Marc-Philippe Huget and Patrice Moreaux*

**MANAGEMENT AND OPTICAL RECOGNITION OF CHARACTERISTIC POINTS OF FINGERPRINTS IMAGES (S146)**  
*A. González Arrieta, J. G. Marín, L. J. García Sánchez, L. Alonso Romero, A. and L. Sánchez Lázaro*

13:00-14:30 Lunch Break

14:30-16:30 Tutorial Session  
(Room Carvoeiro)

**INTRODUCTION TO SOFTWARE AGENTS AND THEIR APPLICATIONS**  
*Dr. Marcin Paprzycki and Dr. Maria Ganzha, Systems Research Institute, Polish Academy of Science, Warsaw, Poland*

16:30-17:00 Coffee Break

17:00-19:00 Tutorial Session  
(Room Carvoeiro)

**INTRODUCTION TO SOFTWARE AGENTS AND THEIR APPLICATIONS**  
*Dr. Marcin Paprzycki and Dr. Maria Ganzha, Systems Research Institute, Polish Academy of Science, Warsaw, Poland*

**Sunday 13<sup>th</sup>, April 2008**

08:30-13:30 Welcome Desk

09:00-10:40 Session FSP 13.1  
Case Studies and Applications // Other  
(Room Carvoeiro)

**USER ATTITUDES AND BEHAVIOR TOWARD PERSONALIZATION: A CASE STUDY (F099)**  
*Seppo Pahlila*

**PERFORMANCE ANALYSIS AND EVALUATION OF A WEBGIS APPLICATION AJAX BASED (F122)**  
*Angelaccio Michele, Buttarazzi Berta and Pigiani Stefano*

**USING MICROSOFT EXCEL CIRCULAR REFERENCE ITERATIONS IN STATISTICAL POWER AND PRECISION ANALYSIS (S133)**  
*António Teixeira and Álvaro Rosa*

**GRID COMPUTING FOR FOREST FIRE PREDICTION (S093)**  
*Ricardo J. N. dos Reis, Nelson P. C. Marques, José M.C. Pereira and José C. F. Pereira*

09:00-10:20 Session FSP 13.2  
Data Mining  
(Room Porches)

**A NEW SPACE-PARTITIONING CLUSTERING METHOD FOR HIGH-DIMENSIONAL DATA MINING (F156)**  
*Jaewoo Chang and Ahreum Kim*

**COMPARATIVE STUDY OF DATA MINING QUERY LANGUAGES (F169)**  
*Mohamed Anis Bachtobji*

**A NEW ADAPTATION OF THE BOOSTING TECHNIQUE IN DATA STREAM PROCESSING (S036)**  
*José Luis Triviño Rodríguez, Amparo Ruiz Sepúlveda and Antonio Jesús Roa Valverde*

**A COMPREHENSIVE AND ADAPTIVE TOOLKIT FOR MISSING VALUES IMPUTATION (S074)**  
*Saad Razaq, Fahad Maqbool, Ahmed Farid and Anwar M.A*

10:30-11:00 Coffee Break

11:00-13:00 Session FP 13.3  
Security  
(Room Carvoeiro)

**AUTOMATED VERIFICATION OF WEB SERVICES TRUST ISSUANCE BINDING (F077)**  
*Llanos Tobarra, Diego Cazorla and Fernando Cuartero*

**SYNTHESIS OF NLFPSR-BASED PSEUDO-RANDOM BIT GENERATORS FOR STREAM CIPHERS (F082)**  
*Elena Dubrova*

**A REAL TIME ALGORITHM FOR FIREWALL ACL INCONSISTENCY DETECTION IN AD HOC NETWORKS (F141)**  
*S. Pozo, R. Ceballos and R. M. Gasca*

**ATTACK CORRELATION AND PREDICTION SYSTEM BASED ON POSSIBILISTIC NETWORKS (F143)**  
*Farah Jemili, Montaceur Zaghdoud and Mohamed Ben Ahmed*

13:15 Best Paper Awards Ceremony and Closing Session  
(Room Carvoeiro)

*Prof. Pedro Isaias*