

# IADIS European Conference on Data Mining 2007

## PRELIMINARY CONFERENCE PROGRAM

### Thursday 5<sup>th</sup>, July 2007

08:30-19:00 Welcome Desk

14:00-14:30 Session O – Opening Session  
(Room: Castelo X)

**OPENING SESSION**

*Prof. Ajith P. Abraham and Prof. Pedro Isaías*

14:30-15:30 Session KL1 – Keynote Presentation  
(Room: Castelo X)

**LINGUISTIC DATA SUMMARIES VIA FUZZY LOGIC AS SIMPLE, EFFICIENT AND HUMAN CONSISTENT DATA MINING MEANS**

*Professor Janusz Kacprzyk., Systems Research Institute, Polish Academy of Sciences Ul, Warsaw, Poland*

15:30-16:50 Session FSP 5.1

**Classification**

(Room:Castelo X)

**PERSONALIZING TEXT SUMMARIZATION BASED ON SENTENCE WEIGHTING (F\_30)**

*Christos Bouras, Vassilis Pouloupoulos and Vassilis Tsogkas*

**A DEMPSTER-SHAFER BELIEF THEORY BASED ALGORITHM FOR CLASSIFICATION OF IMPERFECT DATA (F\_089)**

*Jinsong Zhang, Lakshitha Weerakkody and David Roelant*  
**DIMENSIONALITY REDUCTION WITH PARALLEL CORPORA (S\_076)**  
*YingJu Xia and HaoYu*

16:50-17:10 Coffee Break

17:10-19:40 Session FSP 5.2

**Pre-processing techniques // Data Mining Applications // Bioinformatics**

(Room:Castelo X)

**ON THE SUITABILITY OF TIME SERIES ANALYSIS ON DATA WAREHOUSES (F\_066)**

*Jose Zubcoff, Juan Trujillo and Alfredo Cuzzocrea*

**MINING FREQUENT INDUCED SUBTREES WITH APPLICATION TO PHYLOGENETIC TREES (F\_040)**

*Marwa M. A. Hussein, Taysir H. A. Soliman and Omar H. Karam*

**TOWARD A SEMANTIC DATA RETRIEVAL IN DISTRIBUTED RELATIONAL DATABASE (F\_081)**

*A.Chella, M.Liotta, N.Ingraffia, G.Pilato and G.Vassallo*

**AN APPROACH FOR THE CONCEPTUAL MODELING OF CLUSTERING MINING IN THE KDD PROCESS (S\_059)**

*Jose Zubcoff and Juan Trujillo*

**FEATURE RANKING BASED ON WEIGHTS ESTIMATED BY MULTIOBJECTIVE OPTIMIZATION (S\_086)**

*Daniela Zaharie, Diana Lungeanu and Stefan Holban*

**ANALYZING EFFICIENT EMBEDDING LIST STRUCTURES IN SUBGRAPH MINING (S\_037)**

*Nivin A. Helal, Taysir H. A. Soliman and Omar H. Karam*

17:10-19:15 Session FSP 5.5

**Clustering // Web mining**

(Room: Castelo IV)

**ON APPLICATION OF PROBABILITY METRICS IN THE CLUSTER STABILITY PROBLEM (F\_031)**

*Z. Volkovich and Z. Barzily*

**A WEB RECOMMENDER SYSTEM BASED ON ANT COLONY OPTIMIZATION (F\_085)**

*Murat Göksedef, Gül Nildem Demir and Şule Gündüz Ögüdücü*

**USING SELF ORGANIZING MAP TO INFER COMMUNITIES IN BLOGS' SOCIAL NETWORK (F\_078)**

*Mohsen Jamali, Hassan Abolhassani and Majid Khalilian*

**DETECTING THE COMMUNITY STRUCTURES IN THE GAME OF GO (S\_052)**

*Sule Simsek, Ralph W. Wilkerson and R. Joe Stanley*

**PROFILING AND ANALYZING E-CHURNERS WITH CLUSTERING (R\_025)**

*Vasilis Aggelis*

### Friday 6<sup>th</sup>, July 2007

08:30-14:00 Welcome Desk

09:00-11:00 Session FSP 6.1

**Core Data Mining Topics // Other**

(Room: Castelo X)

**MINING RULES IN THE ONTO4AR FRAMEWORK FOR UPDATING DOMAIN ONTOLOGIES (F\_044)**

*Cláudia Antunes*

**EVALUATING A LEARNING ALGORITHM SELECTION METHOD FOR A RULE EVALUATION SUPPORT TOOL BASED ON OBJECTIVE INDICES (F\_045)**

*Hidenao Abe, Shusaku Tsumoto, Miho Ohsaki and Takahira Yamaguchi*

**REALISTIC SYNTHETIC DATA FOR RULE MINING (S\_033)**

*Colin Cooper and Michele Zito*

**AUTOMATIC TRANSFORMATION OF OWL ONTOLOGIES TO SQL RELATIONAL DATABASES (S\_057)**

*Irina Astrova, Ahto Kalja and Nahum Korda*

**DETECTING INSIDER THREATS WITH MACHINE LEARNING ALGORITHMS (S\_055)**

*Sule Simsek, Ralph W. Wilkerson and R. Joe Stanley*

11:00-11:30 Coffee Break

11:30-13:00 Tutorial 1

(Room Castelo X)

**FROM FUZZY LOGIC TO COMPUTING WITH WORDS AND PERCEPTIONS**

*Professor Janusz Kacprzyk., Systems Research Institute, Polish Academy of Sciences Ul, Warsaw, Poland*

**11:30-13:00 Poster Session  
(Hall)**

**SCADA SYSTEM FOR TEMPERATURE SUPERVISION OF  
SLAB CASTING MOULD (F\_028)**

*Hilario López, Antonio Robles, Iván Machón, Luis Fernando Sancho  
and Eva Fernández*

**A TEXT MINING SUPPORT TOOL USING THE PROJECT  
LOOKING GLASS (F\_029)**

*Yuki Makita, Vu Quang and Hitoshi Sasaki*

**GEOSPATIAL DATA MINING PROBLEMS (F\_067)**

*Magdalene Grantson Borgelt*

**A NEW AND OPTIMAL ARCHITECTURE FOR APPLYING  
ASSOCIATION RULE MINING ALGORITHMS ON GRID  
(F\_093)**

*Asgarali Bouyer, Bahman Arasteh, Mohammad Bager Karimi,  
Mohammad Javad Hoseyni, Ali Bouyer and Ali Movaghar*

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

**15:00 Tour and Conference Dinner**

We visit the city of Lisbon, driving along the Avenida da Liberdade, considered the most important avenue in the city, which lead us to the downtown. Passing the Rossio and the Commerce Square, along the river Tejo we reach the quarter of Belém, where we will see the most important monuments of the city. This was the place where Portuguese navigators started their voyages throughout the seas and discovered new routes and lands, which made the 15th and 16th centuries the “golden age” of Portuguese history. The Belém Tower was the fortress which defended the entrance of the harbour of Lisbon and, along with the Jeronimos Monastery, is World Heritage of UNESCO, masterpieces of the Portuguese manueline style.

We continue to the mouth of the river heading to the coastal glamorous places Estoril and Cascais, once residence of European nobles.

Along the coast of Guincho, we will reach Cabo da Roca, westernmost point of continental Europe, “where the land ends and the sea begins”.

Our next highlight will be the romantic town of Sintra, we drive along the mountain range, World Heritage of UNESCO, as “cultural landscape”, due to the lush vegetation and the magnificent monuments built along the centuries and the history of Portugal. Lord Byron named it “the glorious eden”.

After the visit of the town, once summer residence of Portuguese royalty, we proceed to a typical restaurant, where our dinner will take place.

Tickets for this can be bought at the welcome desk.

**Saturday 7<sup>th</sup>, July 2007**

**08:30-17:00 Welcome Desk**

**09:00-10:00 Session FP 7.1**

**Spatial data mining**

**(Room: Castelo X)**

**EXTRACTING KNOWLEDGE TO PREDICT TSP  
PERFORMANCE ORDER (F\_041)**

*Paula Cecilia Fritzsche, Dolores Rexachs and Emilio Luque*

**MODELING MISSING DATA WITH MARKOV RANDOM  
FIELDS IN LARGE DATA SETS (F\_043)**

*Esa Junttila and Marko Salmenkivi*

**10:10-11:10 Session KL2 – Keynote Presentation**

**(Room: Castelo X)**

**TO COMBINE OR NOT TO COMBINE? MULTIPLE  
CLASSIFIER AND PREDICTION SYSTEMS**

*Professor Bogdan Gabrys, Computational Intelligence Research  
Group, Bournemouth University, UK*

**11:10-11:30 Coffee Break**

**11:30-13:00 Session FP 7.2**

**Forecasting // Financial modeling**

**(Room: Castelo X)**

**SELF-ORGANIZING DATA MINING FOR WEATHER  
FORECASTING (F\_088)**

*Godfrey C. Onwubolu, Petr Buryan, Sitaram Garimella,  
Visagaperuman Ramachandran, Viti Buadromo and Ajith Abraham*

**MF-ARTMAP NEURAL NETWORK PREDICTION OF THE  
MARKET POSITION OF THE COMPANY (S\_082)**

*Agáta Bodnárová and Kamila Olševičová*

**TEXT MINING SYSTEMS FOR PREDICTING MARKET  
RESPONSE TO NEWS (S\_035)**

*Marc-André Mittermayer and Gerhard F. Knolmayer*

**SELF-ORGANIZING DATA MINING USING ENHANCED  
GROUP METHOD DATA HANDLING APPROACH (S\_087)**

*Godfrey C. Onwubolu, Petr Buryan and Ajith Abraham*

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

**14:30-16:55 Session FSP 7.3**

**Bioinformatics // Data Mining Applications**

**(Room: Castelo X)**

**INTELLIGENT DATA ANALYSIS USING MULTIPLE  
CRITERIA DECISION MAKING (F\_090)**

*Crina Grosan and Ajith Abraham*

**SYSTEM OF ANALYTICAL QUESTIONS AND REPORTS  
ON MINING IN HEALTH DATA - A CASE STUDY (S\_039)**

*Jan Rauch and Marie Tomečková*

**A KNOWLEDGE MANAGEMENT SYSTEM FOR  
ORGANIZING MEDLINE DATABASE (S\_027)**

*Su-Shing Chen and Hyunki Kim*

**RANK BASES IN SPACES OF FINITE METRICS (S\_092)**

*Archil Maysuradze*

**EVALUATION OF PROJECTION TECHNIQUES USING  
HUBERT'S  $\Gamma$  STATISTICS (S\_042)**

*Dorina Marghescu*

**A NEW APPROACH TO IMPROVE MULTI-DIMENSIONAL  
STOCK DATA REDUCTION (S\_036)**

*Jian Jiang, Zhe Zhang, Huaqing Wang, Xiaoyan Liu, Xuhao Luo  
and Lin Wang*

**DATA MINING TECHNIQUES FOR SUSPICIOUS EMAIL  
DETECTION: A COMPARATIVE STUDY (R\_048)**

*S. Appavu alias Balamurugan, R. Rajaram, G.Athiappan and M.  
Muthupandian*

**17:15 Best Paper Awards Ceremony and Closing Session**

**(Room: Castelo X)**

*Prof. Ajith P. Abraham and Prof. Pedro Isaías*