

Supporting Institutions:



MDAI 2004
modeling decisions

Modeling Decisions for Artificial Intelligence

[Barcelona, Catalonia](#), Spain, August 2-4, 2004

MDAI 2004 Conference Program

Barcelona, 2-4 August 2004.

Presentation of the conference

Decision making processes, and information fusion at large, are currently embedded in most Artificial Intelligence applications (e.g. applications in electronic commerce or internet). Moreover, fusion methods are nowadays basic tools for some well-established AI technologies (e.g. ensemble methods in Machine Learning).

The aim of this conference is to provide an opportunity for discussing models for information fusion (aggregation operators) and decision as well as computational methods and criteria for model selection and determination.

Secretariat

IIIA-CSIC; Campus UAB s/n; 08193 Bellaterra (Catalonia, Spain), Phone: +34 - 935809570

Location of the conference

Residencia d'Investigadors; c/ Hospital, 64; 08001 Barcelona (Catalonia, Spain)

Metro / Train Station: Plaça Catalunya (L1, L3, RENFE, FGC), Liceu (L3)

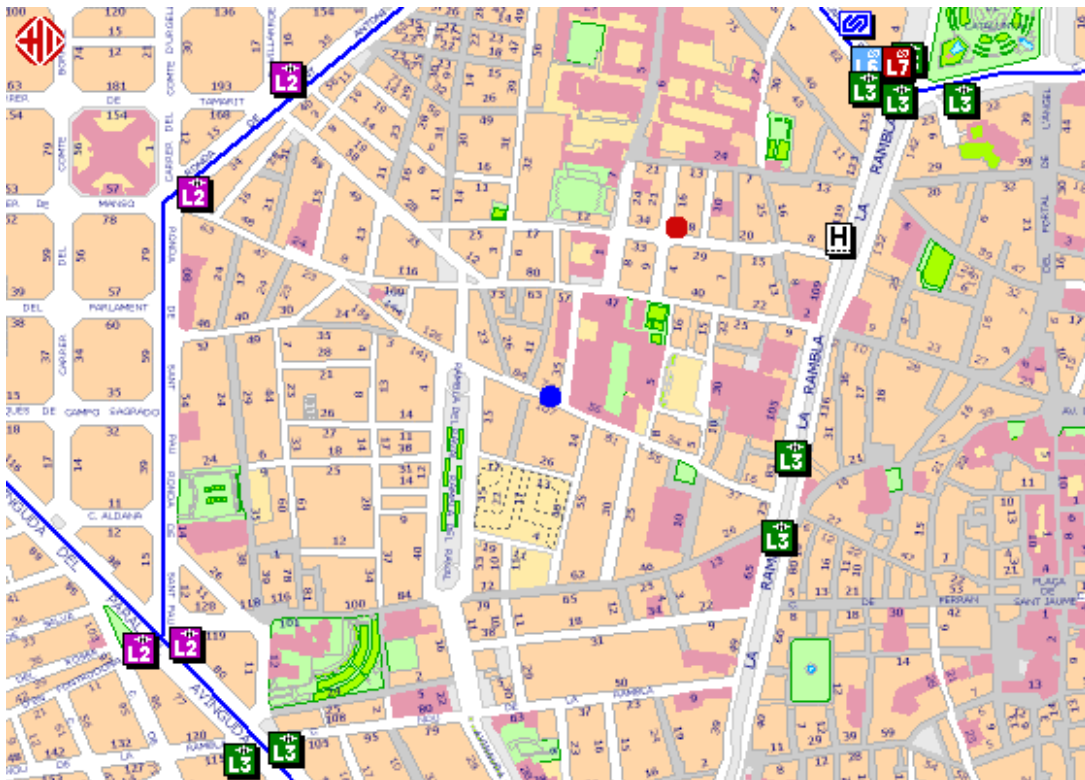
Lunches

Reservation is made for Monday and Tuesday at 13:00, restaurant at c/ Pintor Fortuny, 28.

Conference Dinner

On Monday at 21:00, Hotel Le Meridien, Ramblas 111

Map



Legend: Blue dot: Conference site; Red dot: Lunch (Monday and Tuesday, c/ Pintor Fortuny 28); H: Hotel Le Meridien (Conference dinner); L: Metro & Train Stations

Wednesday, 4th August (morning)

9:30 Plenary talk:

- **S. Miyamoto** (U. Tsukuba, Japan), Chair: V. Torra
Multisets and Fuzzy Multisets as a Framework of Information Systems

10:30 Coffee break

11:00 Clustering Chair: D. Marcek

- A Comparative Study of Clustering Methods for Long Time-Series Medical Databases
S. Tsumoto, S. Hirano
- Fuzzy Multiset Model and Methods of Nonlinear Document Clustering for Information Retrieval
S. Miyamoto, K. Mizutani
- A Feature Weighting Approach to Building Classification Models by Interactive Clustering
L. Jing, J. Huang, M. K. Ng, H. Rong

12:00 Basic concepts Chair: J. Perez

- A Framework for Representation and Manipulation of Vague Knowledge
V. N. Huynh, Y. Nakamori
- Comparing Transitive Closure with a New T-transitivization Method
L. Garmendia, A. Salvador
- On the Interpretation of Some Fuzzy Integrals
V. Torra, Y. Narukawa

13:00 Closing remarks

Tuesday, 3rd August (afternoon)

15:00 Plenary talk:

- **E. Herrera-Viedma** (U. Granada, Spain), Chair: V. Torra
Fuzzy Qualitative Models to Evaluate the Quality on the web

16:00 Linguistic and symbolic models Chair: F. Chiclana

- Measurements of Consensus in Multi-granular Linguistic Group Decision-making
E. Herrera-Viedma, F. Mata, L. Martinez, F. Chiclana, L. G. Perez
- On Detecting Interactions in Hayashi's Second Method of Quantification
H. Imai, D. Izawa, K. Yoshida, Y. Sato

16:40 Coffee Break

17:00 Preferences Chair: Y. Yoshida

- A Learning Procedure to Estimate Missing Values in Fuzzy Preference Relations Based on Additive Consistency
S. Alonso, F. Chiclana, F. Herrera, E. Herrera-Viedma
- Decision Making in a Dynamic System Based on Aggregated Fuzzy Preferences
Y. Yoshida
- Object Positioning Based on Partial Preferences
J. M. Mateo-Sanz, J. Domingo-Ferrer, V. Torra

18:00 Adjourn

Monday, 2nd August (morning)

9:00 Registration

9:30 Opening Session

- Marta Aymerich, Director, Interministerial Council for Research and Technological Innovation, Government of Catalonia.
- Takahiro Yamauchi, Consul, Consulate General of Japan at Barcelona.
- Vicenç Torra, General Chair, MDAI 2004
- Yasuo Narukawa, co-Chair, MDAI 2004

10:15 Plenary talk:

- **Y. Maeda (Fukui U., Japan)**, Chair: S. Miyamoto
Introduction to RoboCup Research in Japan

11:15 Coffee break

11:45 Machine Learning and Data Mining Chair: S. Tsumoto

- Stock Price Forecasting: Statistical, Classical and Fuzzy Neural Network Approach
D. Marcek
- Wavelet Time Shift Properties Integration with Support Vector Machines
J Gomez, I Melgar, J. Seijas
- A Study on Weighting Training Patterns for fuzzy rule-based classification systems
T. Nakashima
- A Machine Learning Approach for Modeling Algorithm Performance Predictors
J. Perez, R. A. Pazos, J. Frausto, L. Cruz, H. Fraire, E. Santiago, N. E. Garcia

13:05 Lunch time

Monday, 2nd August (afternoon)

15:00 Applications (I) Chair: S. Sandri

- A Novel Network Traffic Analysis Method based on Fuzzy Association Rules
X. Yang, W. Yang, M. Zeng, Y. Shi
- Modeling the Distributed Control of the Lower Urinary Tract Using a Multiagent System
D. Ruiz, J. M. Garcia, F. Macia, A. Soriano
- Mining Diagnostic Taxonomy using Interval-based Similarity from Clinical Databases
S. Tsumoto

16:00 Applications (II) Chair: I. Kojadinovic

- Combining Multiple Classifiers using Dempster's Rule of Combination for Text Categorization
Y. Bi, D. Bell, H. Wang, G. Guo, K. Greer
- An Empirical Analysis of Assessment Errors for Weights and Andness in LSP Criteria
J. J. Dujmovic, W. Y. Fang
- Reliability of LSP Criteria
J. J. Dujmovic, W. Y. Fang

17:00 Coffee Break

17:20 Late Breaking session Chair: T. Nakashima

- A Multistrategy Approach for Digital Text Categorization
M. Dolores del Castillo, J. I. Serrano
- A multi-Expert Multi-Criteria Aggregation Model
G. Canfora, L. Troiano
- On the Central Limit Theorem on IFS-Events
J. Petrovicova, B. Riecan

18:05 Adjourn

21:00 Conference Dinner: Hotel Le Meridien Barcelona

Tuesday, 3rd August (morning)

9:30 Plenary talk:

- **R. Mesiar** (Slovak U. of Techn., Slovakia), Chair: Y. Narukawa
Fuzzy Integrals

10:30 Coffee break

11:00 Aggregation Chair: J. J. Dujmovic

- Unsupervised Aggregation by the Choquet Integral Based on Entropy Functionals: Application to the Evaluation of Students
I. Kojadinovic
- Preservation of Distinguished Fuzzy Measure Classes by Distortion
L. Valaskova, P. Struk
- Decision Modelling Using the Choquet Integral
Y. Narukawa, T. Murofushi

12:00 Student session Chair: H. Imai

- Application of Modified Elitism for the Optical Network Components Selection
M. A. Dallaali, M. Premaratne
- Application of Controlled Content Crossover to Solve Optical Component Selection Problem with two Constraints
M. A. Dallaali, M. Premaratne
- Computer Botifarra: simulation and search trees applied to an Imperfect Information Card Game
C. A. Vallve-Guionnet

12:45 Lunch time