

# Modeling Decisions for Artificial Intelligence MDAI 2008

## Venue:

The conference takes place at Vapor Llonch  
Address: Carretera de Barcelona, 208 Bis, Sabadell

## Map:

We have included a map at the end of this program  
with the relevant places.

## Program

### Thursday, 30th October

#### 09:00 Registration

#### 09:15 Opening Session

- Montserrat Capdevila, Sabadell Town Councillor for Industry and Economic Promotion, and member of the Sabadell University Association
- Vicenç Torra, Program Committee co-chair
- Yasuo Narukawa, Program Committee co-chair

#### 09:30 Plenary Talk:

**Prof. Michio Sugeno (Doshisha University, Japan)**

**Toward Elucidating Language Functions in the Brain**

Chair: Y. Narukawa

#### 10:30 Coffee break

#### 11:00 Aggregation – I

Chair: W. Ogryczak

Suitability Maps Based on the LSP Method

*J. J. Dujmovic, G. De Tre, N. Van de Weghe*

Aggregated Mean Ratios of an Interval Induced from Aggregation Operations

*Y. Yoshida*

The uncertain induced generalized OWA operator

*J. M. Merigó, M. Casanovas*

#### 12:00 Fuzzy Measures and Integrals

Chair: E. Herrera-Viedma

The polytope of fuzzy measures and its adjacency graph

*E. F. Combarro, P. Miranda*

Shapley type axiomatization of a solution of game on set systems

*A. Honda, Y. Okazaki*

Quality evaluations of network services using a non-additive set function

*D. Mori, A. Honda, M. Uchida, Y. Okazaki*

#### 13:00 Lunch (planned in the conference building)

**14:30 Clustering and Similarity**

Chair: A. Pradera

Fuzzy Classification Function of Standard Fuzzy c-Means Algorithm for Data with Tolerance using Kernel Function

*Y. Kanzawa, Y. Endo, S. Miyamoto*

On Projection Correlation – Proposal for a New Dissimilarity and Application to Hierarchical Clustering Algorithms

*Y. Endo, F. Uchida, Y. Hamasuna*

A similarity measure for sequences of categorical data based on the ordering of common elements

*C. Gomez-Alonso, A. Valls*

**15:30 Dynamic Programming**

Chair: Y. Yoshida

Golden Complementary Dual in Quadratic Optimization

*A. Kira, S. Iwamoto*

Deterministic Decision Process under Range Constraint Through all Stages

*T. Fujita*

An Intelligent Approach on American Look-Back Option

*T. Ueno, K. Tsurusaki*

**16:30 Coffee Break****16:50 Decision Making**

Chair: J. Domingo

On Consensus Measures in Fuzzy Group Decision Making

*S. Alonso, F.J. Cabrerizo, I. Perez, E. Herrera-Viedma*

SBM and Bipolar Models in Data Envelopment Analysis with Interval Data

*M. Inuiguchi, F. Mizoshita*

A comparison between two approaches to threat evaluation in an air defense scenario

*F. Johansson, G. Falkman*

A Generic Model for Situated Holonic Multi-Agent Systems: A Case Study on Sensor Web Management

*M. Mehdi, J. Nafaa, M. Bernard*

**18:10 Adjourn****20:30 Conference Dinner**

Restaurant La Rambla

Address:

Rambla 194-196, 08201 Sabadell

## Friday, 31st October

### 09:30 Plenary Talk:

**Prof. Kikuchi (Tokai University, Japan)**

Chair: V. Torra

Privacy-Preserving Similarity Evaluation and Application to Remote Biometrics Authentication

### 10:30 Coffee break

#### 11:00 Privacy

Chair: M. Inuiguchi

A Linear-Time Multivariate Micro-aggregation for Privacy Protection in Uniform Very Large Data Sets

*A. Solanas, R. Di Pietro*

Improving Microaggregation for Complex Record Anonymization

*J. Pont-Tuset, J. Nin, P. Medrano-Gracia, J. Ll. Larriba-Pey, V. Muntés-Mulero*

A Shared Steganographic File System With Error Correction

*J. Domingo-Ferrer, M. Bras-Amorós*

#### 12:00 Aggregation – II

Chair: G. De Tré

WOWA Enhancement of the Preference Modeling in the Reference Point Method

*W. Ogryczak*

Uninorms and Non-Contradiction

*A. Pradera*

Choquet Stieltjes integral, Losonczy's means and OWA Operators

*V. Torra, Y. Narukawa*

### 13:00 Lunch (planned in the conference building)

#### 14:30 Computational Intelligence

Chair: S. Miyamoto

A Comprehensive Study on Reducts in Dominance-Based Rough Set Approach

*Y. Kusunoki, M. Inuiguchi*

Fuzzy Rule-Based Learning for Waypoint Selection in a Car Racing Game

*T. Nakashima, Y. Shoji, G. Schaefer*

Container Loading for Nonorthogonal Objects Using Weighted Criteria

*I. Cano, V. Torra*

### 15:30 Coffee Break

#### 15:50 Clustering – II

Chair: A. Valls

Analytical and Numerical Evaluation of the Suppressed Fuzzy C-Means Algorithm

*L. Szilagy, S. Miklos Szilagy, Z. Benyo*

Generalized Agglomerative Clustering with Application to Information Systems

*S. Miyamoto*

New Clustering Algorithms by using Tolerance Vector

*Y. Hamasuna, Y. Endo, S. Miyamoto*

### 16:50 Closing Session

