



MDAI 2016

modeling decisions

13th International Conference on Modeling Decisions for Artificial Intelligence

Sant Julià de Lòria, Andorra
September 19–21, 2016

<http://www.mdai.cat/mdai2016>

Monday September 19th

08:30h - 09:15h	Registration	Centre Cultural i de Congressos Lauredià Hall
09:15h - 09:50h	Opening - Sr. Miquel Nicolau i Vila, Rector de la Universitat d'Andorra. - Vicenç Torra, PC Chair - Yasuo Narukawa, PC Chair	Centre Cultural i de Congressos Lauredià Auditorium Rocafort 2 nd floor
09:50h - 10:50h	Plenary Chair: Vicenç Torra Machine learning and soft computing methods and their application to robocup soccer simulation <i>Prof. Tomoharu NAKASHIMA (Osaka Prefecture University)</i>	
10:50h - 11:20h	Coffee Break	Centre Cultural i de Congressos Lauredià Hall
11:20h - 12:40h	Parallel session (1) Session A. Aggregation operators and decision making Chair: Katsushige Fujimoto On k-additive aggregation functions <i>Anna Kolesarova, Jun Li, Radko Mesiar</i> A Representative in Group Decision by means of the Extended Set of Hesitant Fuzzy Linguistic Term Sets <i>Jordi Montserrat-Adell, Nuria Agell, Monica Sanchez, Francisco Javier Ruiz</i> Suitable Aggregation Operator for a Realistic Supplier Selection Model Based on Risk Preference of Decision Maker <i>Sirin Suprasongsin, Pisal Yenradee, Van Nam Huynh</i> Completing preference by means of analogical proportions <i>Marc Pirlot, Henri Prade, Gilles Richard</i>	Universitat d'Andorra Auditorium 6 th floor
	Session B. Privacy Chair: Marc Juarez Complicity functions for detecting organized crime rings <i>E. Vicente, A. Mateos, A. Jiménez-Martín</i> Partial Domain Theories for Privacy <i>Eva Armengol, Vicenç Torra</i> Privacy-Preserving Cloud-Based Statistical Analyses on Sensitive Categorical Data <i>Sara Ricci, Josep Domingo-Ferrer, David Sanchez</i> Machine Learning Combining with Visualization for Intrusion Detection: A Survey <i>Yang Yu, Jun Long, Fang Liu, Zhiping Cai</i>	Universitat d'Andorra Classroom 4.1 4 th floor
12:40h - 14:30h	Lunch	Restaurant Venecia

14:30h - 15:30h	<p>Plenary Chair: Guillermo Navarro-Arribas Aggregation operators to support collective reasoning <i>Prof. Juan Antonio Rodríguez-Aguilar (IIIA-CSIC)</i></p>	<p>Centre Cultural i de Congressos Lauredià Auditorium Rocafort 2nd floor</p>
15:30h - 16:30h	<p>Parallel session (2) Session A. Clustering and classification Chair: Yuchi Kanzawa Rating Supervised Latent Topic Model for Aspect Discovery and Sentiment Classification in On-line Review Mining <i>Wei Ou, Van-Nam Huynh</i> On Various Types of Even-sized Clustering Based on Optimization <i>Yasunori ENDO, Tsubasa HIRANO, Naohiko KINOSHITA, Yukihiro HAMASUNA</i> Comparison of Trace of Fuzzy Covariance Matrix with Its Kernelization in Cluster Validity Measures based x-means <i>Yukihiro HAMASUNA and Yasunori ENDO</i></p>	<p>Universitat d'Andorra Auditorium 6th floor</p>
	<p>Session B. Decision modeling Chair: Radko Mesiar Monotonicity and Symmetry of IFPD Bayesian Confirmation Measures <i>Emilio Celotto, Andrea Ellero, Paola Ferretti</i> On Choquet integral based classes <i>Vicenç Torra, Yasuo Narukawa</i> Decision Support System for optimization of the irrigation scheduling <i>Mohamed Ali Fourati, Aida Valls, Mounir Ben Ayed, Anas Kamoun, Antonio Moreno</i></p>	<p>Universitat d'Andorra Classroom 4.1 4th floor</p>
16:30h - 17:00h	<p>Coffee break</p>	<p>Centre Cultural i de Congressos Lauredià Hall</p>

Tuesday September 20th

09:00-10:20	Parallel session (3) Session A. Data mining Chair: Eva Armengol Diabetic Retinopathy Risk Estimation Using Fuzzy Rules on Electronic Health Record Data <i>Emran Saleh, Aida Valls, Antonio Moreno, Pedro Romero-Aroca, Sofia de la Riva-Fernandez, and Ramon Sagarra-Alamo</i> A novel Android Application design based on fuzzy ontologies to carry out local based group decision making processes <i>J. A. Morente Molinera, R. Wikstrom, C. Carlsson, F. J. Cabrerizo, I. J. Perez, and E. Herrera-Viedma</i> Automatic Detection and Segmentation of Brain Tumor Using Random Forest Approach <i>Zoltan Kapas, Laszlo Lefkovits, Laszlo Szilagyi</i> An Unsupervised Domain Adaptation Based on CNN and Correlation Alignment <i>Long Gao, Xinwang Liu, Jianping Yin, En Zhu, Jun Long</i>	Universitat d'Andorra Auditorium 6 th floor
	Session B. Decision making and fuzzy integrals Chair: Aoi Honda Weighted quasi-arithmetic means on two-dimensional regions: An independent case <i>Yuji Yoshida</i> Fuzzy Representation for Weight of 4 Levels AHP with Inner Dependence Structure <i>Shin-ichi OHNISHI, Takahiro YAMANOI</i> Axiomatisation of discrete fuzzy integrals with respect to possibility and necessity measures <i>D. Dubois and A. Rico</i> An equivalent definition of pan-integral <i>Yao Ouyang, Jun Li</i>	Universitat d'Andorra Classroom 4.1 4 th floor
10:20-11:20	Plenary Chair: Yasuo Narukawa Fundamentals of risk measurement and aggregation for insurance applications <i>Prof. Montserrat Guillén (Universitat de Barcelona)</i>	Centre Cultural i de Congressos Lauredià Auditorium Rocafort 2 nd floor
11:20-11:50	Coffee break	Centre Cultural i de Congressos Lauredià Hall
11:50-12:50	Parallel session (4) Session A. Clustering Chair: Yasunori Endo On Bezdek-type Possibilistic Clustering for Spherical Data, its Kernelization, and Spectral Clustering Approach <i>Yuchi Kanzawa</i> Hierarchical Clustering via Penalty-Based Aggregation and the Genie Approach <i>Marek Gagolewski, Anna Cena, and Maciej Bartoszek</i> Rank-aware Clustering of Relational Data: Organizing Search Results <i>Petr Krajca</i>	Universitat d'Andorra Auditorium 6 th floor
	Session B. Privacy Chair: Jordi Casas Sampling and merging for graph anonymization <i>Julian Salas</i> Aggressive high-frequency trading and market flash crashes: insights from a network-based early-detection approach <i>Alexandru Stan</i> An Efficient Website Fingerprinting Defense for Tor <i>Marc Juarez, Mohsen Imani, Mike Perry, Claudia Diaz, Matthew Wright</i>	Universitat d'Andorra Classroom 4.1 4 th floor
12:50-14:30	Lunch	Restaurant Venecia
15:00	Excursion and gala diner	Bus

Wednesday September 21st

<p>09:30-10:30</p>	<p>Parallel session (5)</p> <p>Session A. Fuzzy measures and implication functions Chair: Jun Li Lp-space and its dual for a fuzzy measure <i>Aoi Honda and Yoshiaki Okazaki</i> On complementarity and alternativity of non-additive measures with restricted domains <i>Katsushige Fujimoto</i> Building interval-valued implication functions using admissible orders <i>H. Bustince, M.J. Asaiain, B. Bedregal, Z. Takac, M. Baczynski, J. Fernandez, G. P. Dimuro</i></p>	<p>Universitat d'Andorra Auditorium 6th floor</p>
<p>10:30-11:30</p>	<p>Plenary Chair: Josep Domingo-Ferrer Privacy in Bitcoin Transactions: New Challenges From Blockchain Scalability Solutions <i>Prof. Jordi Herrera-Joancomartí (Universitat Autònoma de Barcelona)</i></p>	<p>Centre de Congressos Auditorium Rocafort 2nd floor</p>
<p>11:30-11:50</p>	<p>Coffee break</p>	<p>Centre de Congressos Hall</p>
<p>11:50-13:10</p>	<p>Parallel session (6)</p> <p>Session A. Data mining Chair: Aida Valls Systematic Generation of Risk Evaluation Systems based on Temporal Motivational Theory <i>Jonas Mellin</i> Optimizing robot movements in flexible job shop environment by metaheuristics based on clustered holonic multiagent model <i>Housseem Eddine Nouri, Olfa Belkahla Driss, Khaled Ghédira</i> Nested interval UTA models expressing different confidence levels of preference data <i>Masahiro Inuiguchi, Tomo Sugiyama, Roman Slowinski, Salvatore Greco</i> On definitions of privacy <i>Vicenç Torra, Guillermo Navarro-Arribas</i></p>	<p>Universitat d'Andorra Auditorium 6th floor</p>
<p>13:10-13:20</p>	<p>Closing session</p>	<p>Universitat d'Andorra Auditorium 6th floor</p>
<p>13:20-15:00</p>	<p>Lunch</p>	<p>Centre Cultural i de Congressos Lauredià Hall</p>
<p>15:30</p>	<p>Departure</p>	