

Preliminary Schedule

IPMU'08

April 14, 2008

Schedule Monday 23

8:00–9:30 Registration.

9:30–10:00 Opening.

10:00–11:00 L. Zadeh. *Computation with imprecise probabilities*

11:00–11:30 Coffee Break

11.30 -13.30 Parallel Sessions

Theory 1	Decision 6	Rules 11	Practical Aspects 17
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13.30 -15.00 Lunch

15.00 -16.30 Parallel Sessions

Adaptive Information Processing and Applications (S.S.) 20	Conditioning, Independence and Inference (S.S.) 21	Towards a unified theory of uncertainty (S.S.) 22	Mathematical fuzzy logic (S.S.) 23	Soft approaches to information access on the Web (S.S.) 24
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16.30–17.00 Coffee Break

17.00 -18.30 Parallel Sessions

Adaptive Information Processing and Applications (S.S.) 20	Conditioning, Independence and Inference (S.S.) 21	Towards a unified theory of uncertainty (S.S.) 22	Mathematical fuzzy logic (S.S.) 23	Soft approaches to information access on the Web (S.S.) 24
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20:30– Welcome cocktail

Schedule Tuesday 24

9.00–10.00 I. Gilboa. *Objective Probability and Empirical Similarity*

10.00–10.30 Coffee Break

10.30 -13.00 Parallel Sessions

Theory 2	Decision 7	Fuzzy and Similarity-based LP 12	Image 16	Genetic fuzzy systems (S.S.) 25
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13.00 -15.00 Lunch

15.00 -16.30 Parallel Sessions

Uncertainty in Image Processing Algorithms (S.S.) 26	Aggregation functions (S.S.) 30	Intuitionistic Fuzzy Sets (S.S.) 35	Multicriterial Decision Making (S.S.) 31	Measures and integrals (S.S.) 32
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16.30–17.00 Coffee Break

17.00 -18.30 Parallel Sessions

Uncertainty in Image Processing Algorithms (S.S.) 26	Intuitionistic Fuzzy Sets (S.S.) 35	Multicriterial Decision Making (S.S.) 31	Measures and integrals (S.S.) 32	—
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Schedule Wednesday 25

9.00–10.00 M. Dorigo. *The Swarm-bot: a swarm of self-assembling robots*

11.00–11.30 Coffee Break

11.30 -12.30 Parallel Sessions

Theory 3	Evidence 8	Applications 13	Economy 18	Intuitionistic Fuzzy Sets (S.S.) 35
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12.30 -14.00 Lunch

21:00– Gala Dinner

Schedule Thursday 26

9.00–10.00 E. Ruspini. *TBA*

10.00–10.30 Coffee Break

10.30 -13.00 Parallel Sessions

Theory 4	Evidence 9	Applications 14	Bio-inspired optimization 19	Aggregation functions (S.S.) 30
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13.00 -15.00 Lunch

15.00 -16.30 Parallel Sessions

Aggregation functions (S.S.) 30	Emotional computing (S.S.) 34	Rough Sets and Granular Computing (S.S.) 27	Intelligent Databases and Information Systems (S.S.) 36
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16.30–17.00 Coffee Break

17.00 -18.30 Parallel Sessions

Aggregation functions (S.S.) 30	Type-2 Fuzzy Logic(S.S.) 29	Rough Sets and Granular Computing (S.S.) 27	Intelligent Databases and Information Systems (S.S.) 36
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Schedule Friday 27

9.00–10.00 S. Moral. *The language of gambles for imprecise probabilities*

10.00–10.30 Coffee Break

10.30 -12.30 Parallel Sessions

Theory 5	Evidence 10	Applications 15	Uncertainty in machine learning and data mining (S.S.) 33	Qualitative Solutions (S.S.) 28
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12:30–13.00 Closing

Visit to Málaga downtown (still to be confirmed).

1 THEORY 1

- 21. Sébastien Destercke, Didier Dubois and Eric Chojnacki. Computing with generalized p-boxes: preliminary results
- 77. Audun Jøsang. Abductive Reasoning with Uncertainty
- 63. Vasile Patrascu. A New Penta-valued Logic Based Knowledge Representation
- 54. M Chakraborty and Soma Dutta. Axioms of Paraconsistency and Paraconsistent Consequence Relation
- 18. Didier Dubois. Degrees of truth, partial ignorance and contradiction

2 THEORY 2

- 13. Sergei Ovchinnikov. Cubical transition systems
- 99. Radim Belohlavek. Discovery of factors in binary data via novel methods of matrix decomposition
- 112. Enrique Miranda. Coherent updating on finite spaces
- 20. Slavka Bodjanova and Martin Kalina. Cardinalities of granules of vague data
- 22. Elias F. Combarro and Pedro Miranda. On the polytope of fuzzy measures
- 129. Laura Garrido and Teofilo Brezmes. Fuzzy envelope of a probability distribution

3 THEORY 3

- 90. Dana Hliněná, Martin Kalina and Pavol Král'. Choquet integral and its modifications
- 78. Radim Belohlavek and Michal Krupka. Central points and approximation in residuated lattices
- 38. Krzysztof Pancz. Extensions of Dynamic Information Systems in State Prediction Problems: the First Study
- 126. Susana Díaz, Susana Montes and Bernard De Baets. A comparative study of T-interval orders, T-Ferrers and T-biorders
- 107. Przemysław Grzegorzewski. New Algorithms for Trapezoidal Approximation of Fuzzy Numbers Preserving the Expected Interval

4 THEORY 4

- 153. Patrik Eklund, M Angeles Galán and Jari Kortelainen. On fuzzy successors
- 47. Marco Viviani and Roberto Ghiselli Ricci. Asymptotically Idempotent Aggregation Operators for Trust Management in Multi-agent Systems
- 132. Przemysław Grzegorzewski. A bi-robust test for vague data
- 152. Henri Prade. Responsibility Judgments: Steps towards a formalization
- 97. Daniel Sánchez, Miguel Delgado and Maria-Amparo Vila. A Restriction Level Approach to the Representation of Imprecise Properties
- 105. Carlo Bertoluzza, Viviana Doldi, Jorge Jiménez and Susana Montes. Non-adaptability measures with the branching property

5 THEORY 5

- 6. Luca Bortolussi, Andrea Sgarro and Liviu P. Dinu. Measures of fuzzy disarray in linguistic typology
- 121. Ilyes Jenhani, Zied Elouedi and Salem Benferhat. Properties Analysis of Inconsistency-based Possibilistic Similarity Measures
- 128. Amory Bissier, Reda Boukezzoula and Sylvie Galichet. Linear Fuzzy Regression Using Trapezoidal Fuzzy Intervals
- 138. Patrick Bosc, Allel Hadjali and Olivier Pivert. Graded Tolerant Inclusion and its Axiomatization
- 16. Frank Rügheimer and Rudolf Kruse. An Uncertainty Representation for Set-Valued Attributes with Hierarchical Domains
- 59. Claudio Sossai. An introduction to the category of chance

6 DECISION 1

- 12. Navin Viswanath and Raj Sunderraman. Defaults in Open World Relational Databases
- 29. Jana Špírková. Generalization of IGOWA operators
- 32. José Galindo and Ramón A. Carrasco. Fuzzy Quantifiers with and without Arguments for Databases: Definition, Implementation and Application to Fuzzy Dependencies
- 73. Yuji Yoshida. An Average Value-at-Risk Portfolio under Uncertainty
- 131. Qiu Ji, Peter Haase and Guilin Qi. Combination of Similarity Measures in Ontology Matching by OWA Operator
- 147. Bonifacio Llamazares and Ricardo A. Marques Pereira. Generating simple, Pareto and absolute special majorities by means of mixture operators

7 DECISION 2

- 55. Doretta Vivona and Maria Divari. Aggregation operators for conditional information without probability
- 71. Shin-ichi Ohnishi, Takahiro Yamanoi and Hideyuki Imai. A weights representation for fuzzy constraint-based AHP
- 94. Srdjan Skrbic and Aleksandar Takači. On Development of Fuzzy Relational Database Applications
- 110. Włodzimierz Ogryczak. WOWA Enhancement of the Reference Point Method
- 144. Jesus M. Doña, Osvaldo P. Quintana, Maria E. Valesani and Oscar A. Vallejos. Analysis of Aggregation Methods in Incomplete Database Systems
- 155. Ron Yager. Aggregating non-independent Dempster-Shafer belief Structures

8 EVIDENCE 1

- 10. Johan Schubert. Conflict Management in Dempster-Shafer Theory by Sequential Discounting Using the Degree of Falsity
- 15. David Mercier, Thierry Denoeux and Marie-Hélène Masson. A parametrized family of belief functions correction mechanisms
- 35. Frédéric Pichon and Thierry Denoeux. A new singular property of the unnormalized Dempster's rule among uninorm-based combination rules
- 85. Vincent Ricquebourg, Mélanie Delafosse, Bruno Marhic, Laurent Delahoche, Anne Marie Jolly-Desodt and David Menga. Sensor Failure Detection within the TBM Framework: A Markov Chain Approach
- 75. Audun Jøsang. Cumulative and Averaging Unfusion of Beliefs
- 108. Francois Delmotte and David Gacquer. Detection of defective sources with belief functions

9 EVIDENCE 2

- 103. Wided Guezguez and Nahla Ben Amor. Possibilistic Influence Diagrams Using Information Fusion
- 14. Xiangdong An and Nick Cercone. Hybrid MSBNs
- 79. Boutheina Ben Yaghlane and Walid Trabelsi. BeliefNet Tool: An Evidential Network Toolbox for Matlab
- 80. Boutheina Ben Yaghlane and Asma Hamissi. Belief Integration Approach of Uncertain XML Documents
- 89. Alexander Holland, Madjid Fathi, Manuel Neubach and Michael Abramovici. Competing Fusion for Bayesian Applications
- 93. Hélène Soubaras. On evidential Markov chains

10 EVIDENCE 3

- 116. Minh Ha-Duong. A hierarchical fusion of expert opinion in the TBM
- 66. Keum-Sung Hwang and Sung-Bae Cho. Modular Bayesian Network for Uncertainty Handling on Mobile Device
- 98. Fadi Fayad and Veronique Cherfaoui. Detection and Recognition confidences update in a multi-sensor pedestrian tracking system
- 102. Milan Daniel. Contribution of DS_m Approach to the Belief Function Theory
- 111. Jose M. Merigó and Montserrat Casanovas. Uncertain Decision Making with Dempster-Shafer Theory

11 RULES

- 23. Miguel Delgado, M. Dolores Ruiz and Daniel Sánchez. Analyzing Exception Rules
- 48. Javier Albusac, José Jesús Castro Sánchez and Vallejo-Fernandez David. Learning maximal structure rules with pruning based on distances between fuzzy sets
- 62. Benjamin Quost, Thierry Denoeux and Marie-Hélène Masson. Adapting a Combination Rule to Non-Independent Information Sources
- 106. Celine Fiot, Florent Masseglia, Anne Laurent and Maguelonne Teisseire. Gradual Trends in Fuzzy Sequential Patterns
- 133. Fatiha Boubekeur, Mohand Boughanem and Lynda Lechani. Exploiting association rules and ontology for semantic document indexing
- 142. Hoel Le Capitaine and Carl Frélicot. A new fuzzy 3-rules pattern classifier with reject options based on aggregation of membership degrees

12 FUZZY OR SIMILARITY-BASED LOGIC PROGRAMMING AND RELATED

- 87. Pedro Jose Morcillo and Ginés Moreno. Using FLOPER for Running/Debugging Fuzzy Logic Programs
- 88. Pascual Julián-Iranzo. A procedure for the construction of a similarity relation
- 124. Teresa Alsinet, Carlos Chesñevar and Lluís Godo. Computation of skeptical outputs in P-DeLP satisfying Indirect Consistency: a level-based approach
- 137. Pascual Julian-Iranzo, Ginés Moreno, Jesús Medina-Moreno and Manuel Ojeda-Aciego. Combining Tabulation and Thresholding Techniques for Executing Multi-Adjoint Logic Programs
- 140. Jeroen Janssen, Martine De Cock and Dirk Vermeir. Fuzzy Argumentation Frameworks

13 APPLICATIONS 1

- 28. Steffen Kempe and Rudolf Kruse. Mining Temporal Patterns in an Automotive Environment
- 31. Pablo Bermejo, Jose A. Gamez, José M. Puerta and Roberto Uribe Paredes. Improving KNN-based e-mail classification into folders generating class-balanced datasets
- 57. Takahiro Yamanoi, Hisashi Toyoshima, Shin-ichi Ohnishi, Toshimasa Yamazaki, Michio Sugeno and Elie Sanchez. Discrimination of mental translation by EEG: An equivalent current dipole source localization approach
- 67. Oleg Okun and Helen Priisalu. Lowering Uncertainty of Cancer Classification
- 76. Janusz Kacprzyk and Anna Wilbik. An extended, specificity based approach to linguistic summarization of time series
- 95. Hélène Soubaras. Risk Prediction in a Space-Time Markov Model applied to Propagating Contamination

14 APPLICATIONS 2

- 5. Anthony Grichnik, Michael Taylor, Chris Nikolopoulos and James Mason. Resolving Public Expert Model Disagreement in Medical Risk Stratification
- 36. Georg Ruß, Rudolf Kruse, Martin Schneider and Peter Wagner. Optimizing Wheat Yield Prediction Using Different Topologies of Neural Networks
- 68. Nuno Homem and Joao Paulo Carvalho. Optimizing a Fraud Detection Process
- 82. Adil Haddi, Mohammed Ramdani and Mostafa Bellafkih. The suitable learning path for a learner
- 118. Masayoshi Miyake and Hiroshi Inoue. Note on Weighted Average Strike Asian Options
- 119. Tiago Pais, Rita Ribeiro, Yannick Devouassoux and Stephane Reynaud. Dynamic ranking algorithm for landing site selection

15 APPLICATIONS 3

- 146. Mihaela Costin, Octavian Baltag, Silviu Bejinariu and Marius Zbancioc. Microwave Imagistic and Data Processing Software for Early Breast Cancer Detection
- 44. Berna Ulutas and Attila Islier. Alternative Layout Procedures for Multi Period Production Environments
- 114. Jacky Montmain. How to improve the overall industrial performance in a multi-criteria context
- 120. Pablo Bermejo, Jose Gámez and José M. Puerta. On incremental wrapper-based attribute selection: experimental analysis of the relevance criteria.
- 130. Vikas Singh, Anvaya Rai, Hemanth N., Rohit D.A. and Asim Mukherjee. Algorithms for Real Time Detection and Depth Calculation of Obstacles by Autonomous Robots
- 148. Patrik Eklund. Non-classical logic for elderly care management

16 IMAGE

- 65. Olivier Nempont, Jamal Atif, Elsa Angelini and Isabelle Bloch. Fuzzy attribute openings based on a new fuzzy connectivity class. Application to structural recognition in images
- 50. Tuan Pham. Fuzzy Bio-Image Segmentation with Spatial Covariance
- 84. Giovanni Palma, Isabelle Bloch and Serge Muller. Fuzzy connected filters for fuzzy gray scale images
- 151. Juan Moreno Garcia, Luis Rodriguez-Benitez and José Jesús Castro Sánchez. Fuzzy logic to track objects from MPEG video sequences

17 PRACTICAL ASPECTS

- 34. Jose M. Alonso, Luis Magdalena and Serge Guillaume. Designing Highly Interpretable Fuzzy Rule-Based Systems with Integration of Expert and Induced Knowledge
- 45. Carlos Cano, Sergio Blanco, Fernando Garcia and Armando Blanco. Max-variance Clustering and Biclustering of Microarray Data
- 115. Lawrence Mazlack. Using Imprecise Complexes To Computationally Recognize Causal Relations In Very Large Data Sets
- 117. Romain Laroche, Bernadette Bouchon-Meunier and Philippe Bretier. Uncertainty Management in Dialogue Systems
- 37. Fernando Matia, Agustin Jimenez and Basil M. Al-Hadithi. An Affine Model with Decoupled Fuzzy Dynamics
- 96. Manuel Angel Gadeo and Juan Ramón Velasco. Evolutionary temporal fuzzy control and fuzzy temporal rule-based control applied to adaptive distributed routing.

18 ECONOMY-RELATED

- 100. Olgierd Hryniewicz and Zbigniew Nahorski. Verification of Kyoto Protocol - a fuzzy approach
- 136. Emili Vizuete Luciano and Anna Maria Gil Lafuente. Clan theory and its application in the selection of financial products
- 143. Maria Letizia Guerra, Laerte Sorini and Luciano Stefanini. Fuzzy Investment Decision Making
- 40. Wang Chunhsien and Ting Chung-Te . Evaluating High-Tech Firm Performance using Hierarchical Balanced Scorecard and Fuzzy Schemes
- 122. Antonio Morillas , Luis Robles and Barbara Diaz. Fuzzy Graph associated to a Leontief's I-O matrix
- 101. Chi-Bin Cheng, Yu-Ru Syau and Rung-Tsung Tzeng. Solving a seal-bid reverse auction by fuzzy multiple objective programming

19 Bio-INSPIRED OPTIMIZATION

- 17. Alexander Rotshtein and Hanna Rakytyanska. Inverse Problem Solving based on IF-THEN Rules and Genetic Algorithms
- 46. Jose Angel Fernandez and Juan Ramon Velasco. Adaptive Genetic Algorithm control parameter optimization to verify the network protocol performance
- 52. Toshinori Munakata, Masashi Aono and Masahiko Hara. Amoeba-Based Fuzzy Computing for Uncertain Knowledge Processing
- 86. David Gacquer, Sylvain Piechowiak, François Delmotte and Véronique Delcroix. A genetic approach for training diverse classifier ensembles
- 141. Jon C. Ervin and Sema Alptekin. Techniques for Developing Large Scale Fuzzy Logic Systems
- 154. Louis Gacogne and Sandra Sandri. A study on ant colony systems with fuzzy pheromone dispersion

SPECIAL SESSIONS

20 Adaptive Information Processing and Applications

Session 1. Org: Anca Ralescu

- 149. Pando Georgiev and Anca Ralescu. Fuzzy skeletons and statistical learning theory
- Incorporating a pre-attention mechanism in fuzzy attribute graph for sequential segmentation Geoffroy Fouquier, Jamal Atif, Isabelle Bloch,
- Smart Kitchen: User-centric Cooking Support System Atsushi Hashimoto, Takuya Funatomi, Yoko Yamakata, Koh Kakusho, and Michihiko Minoh,
- Sensing Web Project - How to handle privacy information in sensor data Michihiko Minoh, Koh Kakusho,
- Removing Redundancy from Relevant Features in Text Classification E. Montañes, I. Díaz, E. F. Combarro and J. Ranilla,
- Effectiveness of Value Granulation in Machine Learning for Massively Large and Complex Domain Zachary Moore and Atsushi Inoue,
- Sentence Similarity based on Relevance Jin Feng, Yiming Zhou, Trevor Martin,
- A Validity Index for Fuzzy and Possibilistic C-means Algorithm Chunhui Zhang, Yiming Zhou, Trevor Martin,
- Smart Control for Passive Greenhouses Marius Balas, Valentina Balas

21 Conditioning, Independence and Inference

SESSION 2 Org: Giulianella Coletti and Barbara Vantaggi

Algorithms for the closure of graphoid structures M. Baiocchi, G. Busanello, B. Vantaggi

A Comparison of Architectures for Exact Inference in Evidential Networks B. Ben Yaghlane

Generalized coherence and connection property of imprecise conditional previsions V. Biazzo, A. Gilio, G. Sanfilippo

Independence for decomposable information measures G. Busanello, G. Coletti, B. Vantaggi

Coherent correction of inconsistent conditional probability assessments A. Capotorti, G. Regoli

Persegrams of Compositional Models Revisited: conditional independence R. Jiroušek

Quantum probability: conditioning and inference R. Scozzafava

Conditional Independence in Evidence Theory J. Vejnarová

22 Towards a unified theory of uncertainty

SESSION 3: Organizer: Dan Ralescu

Assisting the drivers by means of the constant time to collision criterion, V. Balas, M. Balas

On Risk-shifting Incentive Problem Based on Option Approach, Hiroshi Inoue and Zhanwei Yang.

Credibility measure of fuzzy sets and applications, X. Li and D. Ralescu

Fuzzy term structure equations, R. Liang, J. Zhang, J. Gao

Some remarks on the single-stage decision problem with fuzzy utilities, Miguel López-Díaz and Luis Rodríguez-Muñiz

Non-existence of universal conditional objects, A. Ramer

Credibilistic equilibria in extensive games with fuzzy payoffs, Y. Yu and J. Gao

23 Mathematical fuzzy logic

SESSION 4 Org: Lluís Godó and Francesc Esteva

Embedding Gödel propositional logic into Prior's tense logic S. Aguzzoli, B. Gerla, V. Marra

Integral representation for divisible SMV_{Δ} algebras T. Flaminio, F. Montagna

On quantified cardinality restrictions in fuzzy description logics under Łukasiewicz semantics F. Bobillo, U. Straccia

Two methods of reconstruction of generators of continuous t-norms M. Navara, M. Petrik

Contraction and Dilatation operators in a semilinear space over residuated lattice I. Perfilieva

On algebras based on representable uninorms E. Marchioni

SMV -algebras and Kripke models: comparing the semantics T. Flaminio, F. Montagna

Principal fuzzy type theories for fuzzy logics in broader sense V. Novák

T-norms based logics preserving degrees of truth F. Bou, F. Esteva, J.M. Font, A. Gil, L. Godó, A. Torrens, V. Verdú

A first approach to the Deduction-Detachment Theorem in logics preserving degrees of truth F. Bou

24 Soft approaches to information access on the Web

SESSION 5 Org: Enrique Herrera-Viedma, Jose Angel Olivas and Gabriella Pasi

Using Imperfect Information in Online Social Systems: Applications and Measures of Betweenness Miguel-Angel Sicilia, Elena García-Barriocanal, Nikolaos Korfiatis

An Evaluation Methodology of Quality for Health Web Sites based on Fuzzy Linguistic Modelling J.M. Moreno J.M. Cadenas, S. Alonso, E. Herrera-Viedma

Modelling User Preferences with Multi-Instance Genetic Programming Amelia Zafra, Sebastián Ventura

Concept-Analyzer: A tool for analyzing fuzzy concepts Sergio Guadarrama, Marta Garrido

Analysis, detection and classification of certain conditional sentences in text documents Cristina Puente, José A. Olivas

A Query Refinement to Concept-based Information Retrieval Silvia Calegari, Elie Sanchez

A Representation Model based on Wordnet Meanings for Internet Search Andrés Carretero, Francisco P. Romero, Jose A. Olivas

25 Genetic fuzzy systems: Learning with MOEAs and tackling high dimensional problems

SESSION 6 Org: Rafael Alcalá, María José del Jesús, Francisco Herrera, Luciano Sánchez

An Improved Multi-Objective Genetic Algorithm for Tuning Linguistic Fuzzy System M.J. Gacto, R. Alcalá, F. Herrera

Linguistic Approximation of TSK Fuzzy Models with Multi-objective Neuro-Evolutionary Algorithms G. Sánchez, Sánchez JF, Alcaraz JM, F. Jiménez

Computational Efficiency of Parallel Distributed Genetic Fuzzy Rule Selection for Large Data Sets Yusuke Nojima, Hisao Ishibuchi

A multi-objective cooperative coevolutionary approach to Mamdani fuzzy system generation Alessio Botta, Pietro Ducange, Beatrice Lazzerini, Francesco Marcelloni

A preliminary study of the effect of feature selection in evolutionary RBFN design M.D. Pérez-Godoy, J.J. Aguilera, F.J. Berlanga, V. Rivas, A.J. Rivera

Genetic Feature Selection for Fuzzy Discretized Data Luciano Sánchez, José Ramón Villar, Inés Couso

26 Management and Representation of Uncertainty within Image Processing Algorithms

SESSION 7 Org: Pilar Sobrevilla

Advanced Image Compression on the Basis of Fuzzy Transforms Irina Perfilieva, V. Pavliska, M. Vajgl, Bernard De Baets,

A Vector Based Fuzzy Filter for Colour Image Sequences T. Mélangé, Mike Nachtgael, E.E. Kerre

A motion and edge adaptive interlaced-to-progressive conversion using fuzzy logic-based systems P. Brox, I. Baturone and S. Sánchez-Solano

Fuzzy regularization of deformation fields for elastic image registration Antonio Tristán Santiago Aja-Fernández

Automatic selection of relevant levels in a hierarchy of fuzzy segmentations B. Prados-Suarez, J. Chamorro-Martínez y D. Sánchez

Structure Texture Detection through Fuzzy Texture Spectrum Miquel Grau-Sánchez, Pilar Sobrevilla, Eduard Montseny

Multi-valued Color Representation Based on Frank t-norm Properties Vasile Patrascu

Grammatical Inference by n-gram Modeling of Convex Groups:Representation of Visual Random Polytopes Peter Michael Goebel, Markus Vincze and Bernard Favre-Bulle

27 Rough Sets and Granular Computing (To be received)

28 On qualitative solutions

SESSION 9 Org: M.T. Lamata and J.L. Verdegay

A fuzzy-set based strategy in dynamic environments C. Cruz, D.A. Pelta and J.L. Verdegay

Construction of a Cooperative Metaheuristic system based on Data Mining and Soft-Computing: Methodological issues J.M. Cadenas M.C. Garrido E. Muñoz

A Fuzzy Random Forest: Fundamental for Design and Construction P. Bonissone, J. M. Cadenas, M. C. Garrido and R. A. Diaz-Valladares.

Heuristics for solving investment problems in a fuzzy environment M.J. Canós, C. Ivorra and V. Liern

Fuzzy Vehicle Routing Problem with Time Windows J. Brito, C. Campos, J.P. Castro, F.J. Martínez, B. Melián, J.A. Moreno, J.M. Moreno

Relation between OWA operator and the SMARTER method E. Cables, M.S. García-Cascales and M.T. Lamata

29 Type-2 Fuzzy Logic

SESSION 10 Org: Jerry Mendel and Simon Coupland

Geometric Logical Operations for Type-2 Fuzzy Sets Simon Coupland and Bob John.

A Type-2 Fuzzy C-Regression Method Asli Celikyilmaz and I. Burhan Turksen.

Stratification in the Type-Reduced Set and the Generalised Karnik-Mendel Iterative Procedure Sarah Greenfield and Robert John.

30 Aggregation functions

SESSION 11 Org. Tomasa Calvo and Luigi Troiano

T1. On the distributivity of fuzzy implications over representable uninorms Michal Baczynski, Balasubramaniam Jayaram

T2. On Properties of Type-1 OWA Operators Shang-Ming Zhou, Francisco Chiclana, Robert John, Jonathan Garibaldi

T3. On the law of importation for some kinds of fuzzy implications Margarita Mas, Miquel Monserrat, Joan Torrens

T4. Additive generation of some classes of finitely-valued t-conorms Javier Martín, Gaspar Mayor, Jaume Monreal

T5. Unipolar parametric evaluation of aggregation functions Anna Kolesarova

T6. On idempotent discrete uninorms Daniel Ruiz-Aguilera, Joan Torrens, Bernard De Baets, Janos Fodor

T7. On the structure of uninorms on L^* Pawel Drygas

T8. Additive generators in interval-valued fuzzy set theory Deschrijver Glad

T9. Characterizing consistency with uninorms: An application in decision making Francisco Chiclana, Sergio Alonso, Enrique Herrera-Viedma, Francisco Herrera

T10. Constraints associated with Choquet integrals and other aggregation-free ranking devices Souhila Kaci, Henri Prade

P1. Modeling Projections in Microaggregation Jordi Nin, Vicenç Torra

P2. Approximating Proximities by Similarities Jordi Recasens, Luis Garmendia

P3. Relevancy Transformation Operators and Aggregation Functions in Fuzzy Inference Process Michal Sabo

P4. Evaluation of Medical Conditions Using the LSP Method Jozo Dujmovic

P5. Aggregation Selection for Hierarchical Fuzzy Signatures: A Comparison of Hierarchical OWA and WRAO Sumudu Mendis, Tom Gedeon

P6. Choquet integral parameter identification based on relative entropy and applied to classification of tomographical images Sylvie Jullien, Gilles Mauris, Lionel Valet, Philippe Bolon, Sylvie Teyssier

31 Research Challenges in MCDM

SESSION 12 Org: Piero Bonissone

Fuzzy information representation for decision aiding Javier Montero, Daniel Gomez and Susana Muñoz.

Multicriterial Decision Making (MCDM): Management of Aggregation Complexity Through Fuzzy Interactions Between Goals or Criteria Rudolf Felix.

Research Issues in Multi Criteria Decision Making (MCDM): The Impact of Uncertainty in Solution Evaluation Piero Bonissone

Graphical exploratory analysis of vague data in the early diagnosis of dyslexia Luciano Sanchez, Ana Palacios, M. R. Suarez, Ines Couso

Multi Criteria Decision Making (MCDM): Management Of Aggregation Complexity Through Fuzzy Interactions Between Goals Or Criteria Rudolf Felix

Lexicographically Prioritized Multicriteria Decisions Using Scoring Functions Ronald Yager

Multi-Objective Genetic Fuzzy Systems: On the Necessity of Including Expert Knowledge in the MOEA Design Process, M. J. Gacto, R. Alcalá and F. Herrera

A Multiobjective Ant Colony Optimization Algorithm for the 1/3 Variant of the Time and Space Assembly Line Balancing Problem M. Chica, O. Cordon, S. Damas, J. Bautista, J. Pereira

32 Measures and integrals

SESSION 13 Org. Endre Pap

Games on distributive lattices and the Shapley interaction transform 125. Fabien Lange and Michel Grabisch.

Measuring uncertainty with priority based logic 25. Aleksandar Takači, Aleksandar Perović and Aleksandar Jovanović.

A universal Integral Independent of Measurable Spaces and Function Spaces E.P. Klement, R. Mesiar, E. PaP

Identification of a fuzzy measure with a L^1 entropy Christophe Labreuche

Comonotone maxitivity and extended Sugeno integral R. Mesiar, K. Ahmed, A. Mesiarova,

Fixed point theorems in probabilistic metric spaces Tatjana Žikić-Došenović,

Pseudo-linear superposition principle for the Monge-Amper equation based on generated pseudo operations with three parameters D. Vivona, I. Štajner-Papuga,

A characterization of the 2-additive Choquet integral Brice Mayag, Michel Grabisch, Christophe Labreuche,

33 Uncertainty in machine learning and data mining

SESSION 14: Org: Plamen Angelov, Eyke Hüllermeier, and Frank Klawonn

Prototype-based classification by fuzzification of cases Parisa KordJamshidi, Bernard De Baets, Guy De Tre

Unification of Fuzzy SVMs and Rule Extraction Methods through imprecise Domain Knowledge Christian Moewes, Rudolf Kruse

A New Algorithm for Mining Frequent Itemsets from Evidential Databases Mohamed Anis BACH TOBJI

FR3: A Fuzzy Rule Learner for Inducing Reliable Classifiers Jens Hühn and Eyke Hüllermeier

On Some New Types of Fuzzy Dependencies C. Molina, Daniel Sánchez, J.M. Serrano, M.A. Vila

A Differential Evolution Algorithm for computing the Fuzzy Variance Luciano Stefanini

34 Emotional computing

SESSION 15: Org: Maria Rifqi, Bernadette Bouchon-Meunier

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