

# Lecture Notes in Computer Science

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313

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## Uncertainty and Intelligent Systems

2nd International Conference on Information Processing  
and Management of Uncertainty in Knowledge-Based Systems  
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## FOREWORD

This volume contains papers which were contributed for presentation at the **Second International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems**, held in Urbino (Italy), July 4-7, 1988. The first conference was held in Paris, in 1986, and the next ones will take place every two years.

Management of uncertainty is at the heart of many knowledge-based systems and a number of approaches have been developed for dealing with this issue. The aim of these conferences is to provide the opportunity for researchers in the area to exchange ideas as well as to bring to the attention of a broader community the potential impact of developments of such methodologies to next generation knowledge based systems. A variety of topics are discussed and new results are presented in the following areas:

- Evidence Combination
- Fuzzy Mathematics
- Fuzzy Set and Possibility Theory
- Information Theory
- Intelligent Data Bases
- Knowledge Acquisition and Machine Learning
- Knowledge Representation
- Logics for Artificial Intelligence
- Neural Nets
- Reasoning Techniques Under Uncertainty

The IPMU-88 Conference has been organized by the Dipartimento di Informatica of the Università' di Torino (Italy) with the support of several national and international organizations.

The members of the organizing committee heartily thank Dr. P. Bonissone, Dr. J. Lowrance, Prof. R. Michalski, Prof. J. Pearl, Prof. H. Prade, Dr. E. Ruspini and Prof. L. Zadeh for their presence as invited speakers and all the authors and referees for their valuable contributions. They wish also to express their gratitude to all people who contributed with their help to the success of the conference; very special thanks have to be given to the SOGESTA Company (Urbino), which offered both the beautiful location and a variety of other supports, making in this way the organization of the conference far easier, and to Banca Popolare di Novara for its financial support. The help of Springer-Verlag, which published these proceedings, is also highly appreciated.

## CONTENTS

### EVIDENCE COMBINATION

Application of Linear Utility Theory to Belief Functions J.-Y. Jaffray	1
A New Approach to Introducing Semantics and Subjectivity in Approximate Reasoning G. Jumarie	9
Belief Functions versus Probability Functions P. Smets	17

### FUZZY MATHEMATICS

Inference via Belief Qualified If-Then Rules Based on Compatibility Relations and Possibility Theory J. Kacprzyk, M. Fedrizzi	25
Fixed Point Theorems for Fuzzy Mappings Liu Zuoshu, Zheng Quan	33
Convergence Properties of Classes of Decomposable Measures M. Squillante, A.G.S. Ventre, S. Weber	41

### FUZZY SETS AND POSSIBILITY THEORY

Some Geometrical Properties of Trapezoidal Functions for Their Association with Linguistic Labels Leading to a Reduced 2-D Representation J. Aguilar Martin	47
Decidability and Recursive Enumerability for Fuzzy Subsets L. Biacino, G. Gerla	55
Stability of Linguistic Modifiers Compatible with a Fuzzy Logic B. Bouchon	63
Some Maximum Likelihood Estimators for the Fuzzy Linear Model P. Diamond	71
On Orderings of Fuzzy Numbers S. Ovchinnikov	79
An Alternative Semantics for Linguistic Variables D.G. Schwartz	87

**INFORMATION THEORY**

Suboptimum Decoding Using Kullback Principle G. Battail, R. Sfez	93
The Choice of Sample Size in Estimating Entropy According to a Stratified Sampling M.A. Gil, C. Caso	102
Information Measures from Rate-Distortion Theories A. Sgarro	112

**INTELLIGENT DATA BASE**

Piecewise Linear Fuzzy Quantities: A Way to Implement Fuzzy Information into Expert Systems and Fuzzy Databases R. Baekeland, E.E. Kerre	119
Sets and Uncertainty in Relational Databases Z. Michalewicz, L.J. Groves	127
Answering Queries Addressed to the Rule Base of a Deductive Database E. Pascual, L. Cholvy	138
A Model for the Management of Imprecise Queries in Relational Databases M. Spies	146

**KNOWLEDGE ACQUISITION AND MACHINE LEARNING**

Constructive Learning with Continuous-Valued Attributes F. Bergadano, R. Bisio	154
A Model for Learning by Source Control R. Garigliano, A. Bokma, D. Long	163
Controlling Inductive Search in RIGEL Learning System R. Gemello, F. Mana	171
Uncertainty in a Numeric Concept Discovery System M.M. Kokar, D.L. Rumpf, B.E. Sawaf	179
On Generating Linguistic Rules for Fuzzy Models Xian-Tu Peng, Pei-Zhuang Wang	185
Learning Driven by the Concepts Structure Z.W. Ras, M. Zemankova	193

**KNOWLEDGE REPRESENTATION**

Checking a Rule Base with Certainty Factor for Incompleteness and Inconsistency Sangchul Kim	201
Modeling Experiential Knowledge with Procedural Schemata of Holistic Perception P.A. Ligomenides	209
Congruence of Structures in Urban Knowledge Representation V. Mancini, W. Bandler	219
Time Representation: An Example M. L. McAllister	226
Fuzzy Qualitative Modeling J.-P. Nordvik, Ph. Smets, P. Magrez	231
Knowledge Representation Systems: Syntactic Methods A. Wasilewska	239

**LOGICS FOR ARTIFICIAL INTELLIGENCE**

A Logical Approach to Deal with Incomplete Causal Models in Diagnostic Problem Solving L. Console, P. Torasso	255
A Many Valued Logic of Belief: Detachment Operators D. Driankov	265
Thresholds for Certainty and the Modal Logic S3 G. Epstein	273

**NEURAL NETS**

Knowledge Acquisition on Neural Networks Su-Shing Chen	281
Neural Net Connection Estimates Applied for Feature Selection and Improved Linear Classifier Design A.J. Surkan	290

**REASONING TECHNIQUES UNDER UNCERTAINTY**

Modulation of the Intensity of Formalized Attributes A.O. Arigoni	299
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## VIII

Inflammatory Protein Variations: Medical Knowledge Representation and Approximate Reasoning R. Bartolin, V. Bonniol, E. Sanchez	306
Sequential Bayesian Test from Fuzzy Experimental Information M.R. Casals, A. Salas	314
An Intuitive Representation of Imperfect Information E. Charpentier, J.P. Daurès, P. Dujols, F. Grémy	322
A Method for Determination of Evidential Weighting Factors in a Medical Expert System D.L. Hudson, M.E. Cohen	330
A Study of Arab Computers Users: A Special Case of a General HCI Methodology M. Kallala, W. Bellin	338
Knowledge-Based Systems Application to Reduce Risk in Software Requirements J.D. Palmer, M. Myers	351
Prioritized, Non-Pointwise, Nonmonotonic Intersection and Union for Commonsense Reasoning R.R. Yager	359

### LATE ARRIVALS

Multi-Criteria Decision Making in Terms of Probabilistic Sets E. Czogala	366
Putting into Practice Moreau's Extended Generalized Modus Ponens A.M. Petieau, A. Moreau, D. Willaëys	373
Evidence Aggregation in Expert Judgments S.F. Garribba, A. Servida	385

### INVITED PAPER

Conditioning in Possibility and Evidence Theories - A Logical Viewpoint D. Dubois, H. Prade	401
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