Record Nr. UNISA996465826703316 Modeling Decisions for Artificial Intelligence [[electronic resource]]: **Titolo** Second International Conference, MDAI 2005, Tsukuba, Japan, July 25-27, 2005, Proceedings / / edited by Yasuo Narukawa, Sadaaki Miyamoto Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2005 Edizione [1st ed. 2005.] 1 online resource (XII, 476 p.) Descrizione fisica Lecture Notes in Artificial Intelligence;; 3558 Collana Disciplina 006.3 Artificial intelligence Soggetti Computers Mathematical logic Database management Computer simulation Operations research **Decision making** Artificial Intelligence Computation by Abstract Devices Mathematical Logic and Formal Languages **Database Management** Simulation and Modeling Operations Research/Decision Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Modeling Decisions for Artificial Intelligence: Theory, Tools and Applications -- Invited Talks -- Capacities and Games on Lattices: A Survey of Results -- Cryptosystems Based on Elliptic Curve Pairing --Building a Brain-Informatics Portal on the Wisdom Web with a Multilayer Grid: A New Challenge for Web Intelligence Research -- Soft Computing in Human Centered Systems Thinking -- Regular Papers --

Qualitative Model of Game Theory -- Regularity Properties of Null-

Additive Fuzzy Measure on Metric Spaces -- A Statistical Criterion of Consistency in the Analytic Hierarchy Process -- Evaluating the Airline Service Quality by Fuzzy OWA Operators -- An Adaptive Module for the Consensus Reaching Process in Group Decision Making Problems --Qualitative Reasoning Model for Tradeoff Analysis -- Evaluation of Control Performance of Multi-stage Fuzzy Reasoning in Anti-lock Braking System for Railways Using Fuzzy Reasoning -- One-Way and Two-Party Authenticated ID-Based Key Agreement Protocols Using Pairing -- Noise-Robust Watermarking for Numerical Datasets --Possibilistic Approach to Kernel-Based Fuzzy c-Means Clustering with Entropy Regularization -- Fuzzy c-Means Clustering in the Presence of Noise Cluster for Time Series Analysis -- Quantification of Multivariate Categorical Data Considering Clusters of Items and Individuals -- A New Approach to Fuzzification of Memberships in Cluster Analysis --Dynamic Clustering Based on Universal Gravitation Model -- Extracting Classification Rules with Support Rough Neural Networks -- On a Tool for Rough Non-deterministic Information Analysis and Its Perspective for Handling Numerical Data -- Several Approaches to Attribute Reduction in Variable Precision Rough Set Model -- Checking Whether or Not Rough-Set-Based Methods to Incomplete Data Satisfy a Correctness Criterion -- Fuzzy Model Based Environmental Stiffness Identification in Stable Force Control of a Robot Manipulator --Omnidirectional Adaptive Behavior Control for Autonomous Mobile Robot -- Pairwise Matching of Spots in 2-DE Images Using Hopfield Network -- A New Concept of a Similarity Measure for Intuitionistic Fuzzy Sets and Its Use in Group Decision Making -- Perceptive Evaluation for the Optimal Discounted Reward in Markov Decision Processes -- Cancer Prediction Using Diversity-Based Ensemble Genetic Programming -- Language Generation for Conversational Agent by Evolution of Plan Trees with Genetic Programming -- Optimization of Fuzzy Systems Based on Fuzzy Set Using Genetic Optimization and Information Granulation -- A New Approach to Genetically Optimized Hybrid Fuzzy Set-Based Polynomial Neural Networks with FSPNs and PNs -- Genetically Optimized Hybrid Fuzzy Neural Networks in Modeling Software Data -- Genetically Dynamic Optimized Selforganizing Fuzzy Polynomial Neural Networks with Information Granulation Based FPNs -- NMF-Based Approach to Font Classification of Printed English Alphabets for Document Image Understanding --Edge-Based Spatial Descriptor Using Color Vector Angle for Effective Image Retrieval -- Efficient 3D Model Retrieval Method Using Geometric Characteristics in Intersected Meshes -- Bipolar Queries Revisited -- A Decision Support System for Rheumatic Evaluation and Treatment in Oriental Medicine Using Fuzzy Logic and Neural Network -- Modeling Designers' Color Decision Processes Through Emotive Choice Mapping -- An Automatic Rule Creating Method for Kansei Data and Its Application to a Font Creating System -- Video Motion Capture for Virtual Characters -- Picture Languages in Medical Pattern Knowledge Representation and Understanding -- Loading Problem in Multiple Containers and Pallets Using Strategic Search Method -- Meta-data: Characterization of Input Features for Meta-learning.

Sommario/riassunto

This volume contains papers presented at the 2nd International Conference on Modeling Decisions for Arti?cial Intelligence (MDAI 2005), held in Tsukuba, Japan, July 25–27. This conference follows MDAI 2004 (held in Barcelona, Catalonia, Spain), the proceedings of which were also published in the LNAI series (Vol. 3131). The aim of this conference was to provide a forum for researchers to discuss about theory and tools for modeling decisions, as well as applications that compass decision-making processes and information fusion

techniques. In this second edition, special focus was given to applications related to risk, security and safety. The organizers received 118 papers, from 14 di?erent countries, 40 of which are published in this volume. Each submission received at least two reviews from the Program Committee and a few external reviewers. We would like to express our gratitude to them for their work. The plenary talks presented at the conference are also included in this volume. The conference was supported by the Department of Risk Engineering of the University of Tsukuba, the Japan Society for Fuzzy Theory and Intelligent Informatics (SOFT), the Catalan Association for Arti?cial Intelligence (ACIA), the European Society for Fuzzy Logic and Technology (EUSFLAT) and the Generalitat de Catalunya (AGAUR 2004XT 0004).