Record Nr. UNISA996465280003316 Algorithmic Decision Theory [[electronic resource]]: First International **Titolo** Conference, ADT 2009, Venice, Italy, October 2009, Proceedings // edited by Francesca Rossi, Alexis Tsoukias Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-642-04428-X Edizione [1st ed. 2009.] 1 online resource (XII, 460 p.) Descrizione fisica Lecture Notes in Artificial Intelligence;; 5783 Collana 005.1 Disciplina Soggetti Mathematical logic Computer science—Mathematics Discrete mathematics Mathematical statistics Mathematical Logic and Formal Languages Mathematics of Computing **Discrete Mathematics** Discrete Mathematics in Computer Science Probability and Statistics in Computer Science Symbolic and Algebraic Manipulation 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 Social Choice Theory -- A Complete Conclusion-Based Procedure for Judgment Aggregation -- A Geometric Approach to Paradoxes of Majority Voting in Abstract Aggregation Theory -- Manipulating Tournaments in Cup and Round Robin Competitions -- Iterated Majority Voting -- Committee Selection with a Weight Constraint Based on Lexicographic Rankings of Individuals -- The Effects of Noise and Manipulation on the Accuracy of Collective Decision Rules -- Subset Weight Maximization with Two Competing Agents -- The Complexity of Probabilistic Lobbying -- On the Complexity of Efficiency and Envy-Freeness in Fair Division of Indivisible Goods with Additive Preferences -- On Low-Envy Truthful Allocations -- On Multi-dimensional Envy-Free Mechanisms -- Stable Rankings in Collective Decision Making with

Imprecise Information -- Finding Best k Policies -- Multiple Criteria Decision Analysis -- New Hybrid Recommender Approaches: An Application to Equity Funds Selection -- A Prescriptive Approach for Eliciting Imprecise Weight Statements in an MCDA Process -- Inverse Analysis from a Condorcet Robustness Denotation of Valued Outranking Relations -- Directional Decomposition of Multiattribute Utility Functions -- The Possible and the Necessary for Multiple Criteria Group Decision -- Preferences in an Open World -- Extending Argumentation to Make Good Decisions -- Building Consistent Pairwise Comparison Matrices over Abelian Linearly Ordered Groups --Aggregating Interval Orders by Propositional Optimization -- Circular Representations of a Valued Preference Matrix -- Decision under Uncertainty -- The First Belief Dominance: A New Approach in Evidence Theory for Comparing Basic Belief Assignments -- Interpreting GUHA Data Mining Logic in Paraconsistent Fuzzy Logic Framework -- Insuring Risk-Averse Agents -- Adversarial Risk Analysis: Applications to Basic Counterterrorism Models -- Game Theory without Decision-Theoretic Paradoxes -- Ranking Methods Based on Dominance Measures Accounting for Imprecision -- Optimisation -- Optimizing the Hurwicz Criterion in Decision Trees with Imprecise Probabilities -- Axioms for a Class of Algorithms of Sequential Decision Making -- Algorithmic Aspects of Scenario-Based Multi-stage Decision Process Optimization -- Choquet Optimization Using GAI Networks for Multiagent/Multicriteria Decision-Making -- Compact Preference Representation in Stable Marriage Problems -- Neuroevolutionary Inventory Control in Multi-Echelon Systems -- Determining a Minimum Spanning Tree with Disjunctive Constraints -- Learning -- An Inductive Methodology for Data-Based Rules Building -- A Framework for Designing a Fuzzy Rule-Based Classifier -- Anytime Self-play Learning to Satisfy Functional Optimality Criteria.

Sommario/riassunto

This volume contains the papers presented at ADT 2009, the first International Conference on Algorithmic Decision Theory. The conference was held in San Servolo, a small island of the Venice lagoon, during October 20-23, 2009. The program of the conference included oral presentations, posters, invited talks, and tutorials. The conference received 65 submissions of which 39 papers were accepted (9 papers were posters). The topics of these papers range from computational social choice preference modeling, from uncertainty to preference learning, from multi-criteria decision making to game theory.