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Collana	Lecture Notes in Artificial Intelligence ; ; 2143
Disciplina	006.3
Soggetti	Artificial intelligence Programming languages (Electronic computers) Mathematical logic Information technology Business—Data processing Artificial Intelligence Programming Languages, Compilers, Interpreters Mathematical Logic and Formal Languages IT in Business
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Invited Papers -- Graphical Models as Languages for Computer Assisted Diagnosis and Decision Making -- Planning with Uncertainty and Incomplete Information -- What's Your Preference? And How to Express and Implement It in Logic Programming! -- Contributed Papers -- On Preference Representation on an Ordinal Scale -- Rule-Based Decision Support in Multicriteria Choice and Ranking -- Propositional Distances and Preference Representation -- Contributed Papers -- Value Iteration over Belief Subspace -- Space-Progressive Value Iteration: An Anytime Algorithm for a Class of POMDPs -- Contributed Papers -- Reasoning about Intentions in Uncertain Domains -- Troubleshooting with Simultaneous Models -- A Rational Conditional

Utility Model in a Coherent Framework -- Contributed Papers --
Probabilistic Reasoning as a General Unifying Tool -- An Operational
View of Coherent Conditional Previsions -- Contributed Papers --
Decomposition of Influence Diagrams -- Mixtures of Truncated
Exponentials in Hybrid Bayesian Networks -- Importance Sampling in
Bayesian Networks Using Antithetic Variables -- Using Recursive
Decomposition to Construct Elimination Orders, Jointrees, and Dtrees
-- Caveats For Causal Reasoning With Equilibrium Models --
Contributed Papers -- Supporting Changes in Structure in Causal Model
Construction -- The Search of Causal Orderings: A Short Cut for
Learning Belief Networks -- Stochastic Local Algorithms for Learning
Belief Networks: Searching in the Space of the Orderings -- An
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Sequential Valuation Networks: A New Graphical Technique for
Asymmetric Decision Problems -- A Two-Steps Algorithm for Min-
Based Possibilistic Causal Networks -- Contributed Papers --
Computing Intervals of Probabilities with Simulated Annealing and
Probability Trees -- Probabilistic Logic under Coherence, Model-
Theoretic Probabilistic Logic, and Default Reasoning -- Contributed
Papers -- Belief Functions with Partially Ordered Values -- Dempster
Specialization Matrices and the Combination of Belief Functions -- On
the Conceptual Status of Belief Functions with Respect to Coherent
Lower Probabilities -- About Conditional Belief Function Independence
-- The Evaluation of Sensors' Reliability and Their Tuning for
Multisensor Data Fusion within the Transferable Belief Model --
Coarsening Approximations of Belief Functions -- Contributed Papers
-- Label Semantics: A Formal Framework for Modeling with Words --
Reasoning about Knowledge Using Rough Sets -- Contributed Papers
-- The Capacity of a Possibilistic Channel -- New Semantics for
Quantitative Possibility Theory -- Bridging logical, comparative and
graphical possibilistic representation frameworks -- Contributed
Papers -- Ellipse fitting with uncertainty and fuzzy decision stage for
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Sommario/riassunto

This book constitutes the refereed proceedings of the 6th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty, ECSQARU 2001, held in Toulouse, France in September 2001. The 68 revised full papers presented together with three invited papers were carefully reviewed and selected from over a hundred submissions. The book offers topical sections on decision theory, partially observable Markov decision processes, decision-making, coherent probabilities, Bayesian networks, learning causal networks, graphical representation of uncertainty, imprecise probabilities, belief functions, fuzzy sets and rough sets, possibility theory, merging, belief revision and preferences, inconsistency handling, default logic, logic programming, etc.
