Record Nr. UNISA996466457603316 Scalable Uncertainty Management [[electronic resource]]: 9th **Titolo** International Conference, SUM 2015, Québec City, QC, Canada. September 16-18, 2015. Proceedings / / edited by Christoph Beierle, Alex Dekhtyar Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-23540-0 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (XIX, 421 p. 77 illus.) Collana Lecture Notes in Artificial Intelligence; ; 9310 Disciplina 003.54 Soggetti Artificial intelligence Application software Information storage and retrieval Computer communication systems Database management Data mining Artificial Intelligence Information Systems Applications (incl. Internet) Information Storage and Retrieval **Computer Communication Networks** Database Management Data Mining and Knowledge Discovery Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto The mysterious world of normal numbers -- Bayesian Networks --Probabilistic Query Answering in the Bayesian Description Logic BEL --The Complexity of Plate Probabilistic Models -- DL-Lite Bayesian Networks: A Tractable Probabilistic Graphical Model -- Probabilistic Models -- State Space Search with Stochastic Costs and Risk Aversion -- On the Impact of Junction-Tree Topology on Weighted Model Counting -- A System for Probabilistic Inductive Answer Set

Programming -- Towards Large-Scale Probabilistic OBDA -- Reasoning

over Linear Probabilistic Knowledge Bases with Priorities -- Intelligent Data Analytics -- Evenness-based reasoning with logical proportions applied to classification -- Multivariate Cluster-Based Discretization for Bayesian Network Structure Learning -- Modeling and Forecasting Time Series of Compositional Data: A Generalized Dirichlet Power Steady Model -- Linguistic and Graphical Explanation of a Cluster-based Data Structure -- Possibility Theory, Belief Functions and Transformations --Probability-possibility transformations: Application to credal networks -- Planning in Partially Observable Domains with Fuzzy Epistemic States and Probabilistic Dynamics -- Propagation of Belief Functions in Singly-Connected Hybrid Directed Evidential Networks -- Uncertain logical gates in possibilistic networks. An application to human geography -- Argumentation -- Undercutting in argumentation systems -- Formalizing Explanatory Dialogues -- Towards a dual process cognitive model for argument evaluation -- Change in abstract bipolar argumentation systems -- On argumentation with purely defeasible rules -- Dealing with Inconsistency -- A possibilistic analysis of inconsistency -- First-Order Under-Approximations of Consistent Query Answers -- Using Rules of Thumb for Repairing Inconsistent Answer Set Program -- Applications -- Fuzzy XPath for the Automatic Search of Fuzzy Formulae Models -- ERBlox: Combining Matching Dependencies with Machine Learning for Entity Resolution --Matching uncertain identities against sparse knowledge.

Sommario/riassunto

This book constitutes the refereed proceedings of the 9th International Conference on Scalable Uncertainty Management, SUM 2015, held in Québec City, QC, Canada, in September 2015. The 25 regular papers and 3 short papers were carefully reviewed and selected from 49 submissions. The call for papers for SUM 2015 solicited submissions in all areas of managing and reasoning with substantial and complex kinds of uncertain, incomplete or inconsistent information. These include applications in decision support systems, risk analysis, machine learning, belief networks, logics of uncertainty, belief revision and update, argumentation, negotiation technologies, semantic web applications, search engines, ontology systems, information fusion, information retrieval, natural language processing, information extraction, image recognition, vision systems, data and text mining, and the consideration of issues such as provenance, trust, heterogeneity, and complexity of data and knowledge.