

1. Record Nr.	UNINA9910143500003321
Titolo	Applications of uncertainty formalisms // Anthony Hunter, Simon D. Parsons (Eds.)
Pubbl/distr/stampa	Berlin ; ; Heidelberg : , : Springer, , [1998] Â©1998
ISBN	3-540-49426-X
Edizione	[1st ed. 1998.]
Descrizione fisica	1 online resource (VIII, 474 p. 64 illus.)
Collana	Lecture Notes in Computer Science ; ; 1455
Disciplina	003.54
Soggetti	Uncertainty (Information 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 indexes.
Nota di contenuto	to uncertainty formalisms -- A Review of Uncertainty Handling Formalisms -- Application case studies -- Using Uncertainty Management Techniques in Medical Therapy Planning: a Decision-Theoretic approach -- An Ordinal Approach to the Processing of Fuzzy Queries with Flexible Quantifiers -- Using Uncertainty Techniques in Radio Communication Systems -- Handling imperfect knowledge in Milord II for the identification of marine sponges -- Qualitative risk assessment fulfils a need -- Information Retrieval and Dempster-Shafer's Theory of Evidence -- Uncertainty Measures associated with Fuzzy Rules for Connection Admission Control in ATM Networks -- Handling uncertainty in control of autonomous robots -- Some Problems in Trying to Implement Uncertainty Techniques in Automated Inspection -- Correlation using uncertain and temporal information -- Arguing about beliefs and actions -- Analysis of Multi-Interpretable Ecological Monitoring Information -- Technology for applications -- A local handling of inconsistent knowledge and default bases -- The XRay system: An implementation platform for local query-answering in default logics -- Model-based Diagnosis: A Probabilistic Extension -- Background to and Perspectives on Possibilistic Graphical Models -- How much does an agent believe: an extension of modal epistemic logic -- Safety Logics -- Modeling Uncertainty with Propositional Assumption-Based Systems.
Sommario/riassunto	An introductory review of uncertainty formalisms by the volume editors

begins the volume. The first main part of the book introduces some of the general problems dealt with in research. The second part is devoted to case studies; each presentation in this category has a well-delineated application problem and an analyzed solution based on an uncertainty formalism. The final part reports on developments of uncertainty formalisms and supporting technology, such as automated reasoning systems, that are vital to making these formalisms applicable. The book ends with a useful subject index. There is considerable synergy between the papers presented. The representative collection of case studies and associated techniques make the volume a particularly coherent and valuable resource. It will be indispensable reading for researchers and professionals interested in the application of uncertainty formalisms as well as for newcomers to the topic.
