

1. Record Nr.	UNINA9910260644903321
Titolo	Constraint-based reasoning / / edited by Eugene C. Freuder and Alan K. Mackworth
Pubbl/distr/stampa	Cambridge, Mass., : MIT Press, 1994
Descrizione fisica	1 online resource (403 pages) : illustrations
Altri autori (Persone)	FreuderEugene C MackworthAlan K
Disciplina	006.3
Soggetti	Constraints (Artificial intelligence) Reasoning
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Bradford book." Reprinted from Artificial intelligence, volume 58, numbers 1-3, 1992.
Sommario/riassunto	Constraint-based reasoning is an important area of automated reasoning in artificial intelligence, with many applications. These include configuration and design problems, planning and scheduling, temporal and spatial reasoning, defeasible and causal reasoning, machine vision and language understanding, qualitative and diagnostic reasoning, and expert systems. Constraint-Based Reasoning presents current work in the field at several levels: theory, algorithms, languages, applications, and hardware. Constraint-based reasoning has connections to a wide variety of fields, including formal logic, graph theory, relational databases, combinatorial algorithms, operations research, neural networks, truth maintenance, and logic programming. The ideal of describing a problem domain in natural, declarative terms and then letting general deductive mechanisms synthesize individual solutions has to some extent been realized, and even embodied, in programming languages. Contents :- Introduction, E. C. Freuder, A. K. Mackworth.- The Logic of Constraint Satisfaction, A. K. Mackworth.- Partial Constraint Satisfaction, E. C. Freuder, R. J. Wallace.- Constraint Reasoning Based on Interval Arithmetic: The Tolerance Propagation Approach, E. Hyvonen.- Constraint Satisfaction Using Constraint Logic

Programming, P. Van Hentenryck, H. Simonis, M. Dincbas.- Minimizing Conflicts: A Heuristic Repair Method for Constraint Satisfaction and Scheduling Problems, S. Minton, M. D. Johnston, A. B. Philips, and P. Laird.- Arc Consistency: Parallelism and Domain Dependence, P. R. Cooper, M. J. Swain.- Structure Identification in Relational Data, R. Dechter, J. Pearl.- Learning to Improve Constraint-Based Scheduling, M. Zweben, E. Davis, B. Daun, E. Drascher, M. Deale, M. Eskey.- Reasoning about Qualitative Temporal Information, P. van Beek.- A Geometric Constraint Engine, G. A. Kramer.- A Theory of Conflict Resolution in Planning, Q. Yang.A Bradford Book.
