1. Record Nr. UNINA9910143634403321 AIIA 99:Advances in Artificial Intelligence: 6th Congress of the Italian **Titolo** Association for Artificial Intelligence Bologna, Italy, September 14-17. 1999 Selected Papers / / edited by Evelina Lamma, Paolo Mello Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-46238-4 Edizione [1st ed. 2000.] 1 online resource (XI, 394 p.) Descrizione fisica Lecture Notes in Artificial Intelligence;; 1792 Collana 006.3 Disciplina Soggetti Artificial intelligence Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Knowledge Representation -- Generalized default logic: minimal knowledge, autoepistemic and default reasoning reconciled -- A Description Logic for Image Retrieval -- Certainty-factor-like Structures in Bayesian Networks -- Sensitivity Analysis for Threshold Decision Making with Bayesian Belief Networks -- Automated Reasoning -- Abduction with Negation as Failure for Active and Reactive Rules -- An Implementation for Abductive Logic Agents --Solving the Satisfiability Problem Through Boolean Networks --Applying the Davis-Putnam procedure to non-clausal formulas -- The SAT-Based Approach for Classical Modal Logics -- Local Search Techniques for Disjunctive Logic Programs -- Labelled Tableaux for Non-Normal Modal Logics -- Temporal and Qualitative Reasoning --

Pairing Transitive Closure and Reduction to Efficiently Reason about Partially Ordered Events -- TimeNetManager — A Software Tool for Generating Random Temporal Networks -- A fuzzy extension of Allen's Interval Algebra -- Non Binary CSPs and Heuristics for Modeling and Diagnosing Dynamic Systems -- Machine Learning, Data Mining and Theory Revision -- Relational Learning: Hard Problems and Phase Transitions -- A Machine Learning Approach to Web Mining -- Experiences with a Logic-based Knowledge Discovery Support

Environment -- Conceptual Change in Learning Naive Physics: The Computational Model as a Theory Revision Process -- Using the Hermite Regression Formula to Design a Neural Architecture with Automatic Learning of the "Hidden" Activation Functions -- Natural Language and WWW Interfaces -- XIG: Generating from Interchange Format using Mixed Representations -- Natural Language Access to Public Administration Data: the TAMIC-P System -- On the application of personalization techniques to news servers on the WWW -- Multiagent Systems -- Levels of Delegation and Levels of Adoption as the basis for Adjustable Autonomy -- Notes on formalizing coordination? -- Autonomous Spacecraft Resource Management: A Multi-Agent Approach -- Multi-Agent Scene Interpretation -- An Algorithm for Recruitment of Agents in Agency Design -- Perception and Robotics --Towards a Conceptual Representation of Actions -- Cellular Automata based Inverse Perspective Transform as a Tool for Indoor Robot Navigation -- Planning and Scheduling -- On Plan Adaptation through Planning Graph Analysis -- Real-Time Motion Planning in Autonomous Vehicles: A Hybrid Approach -- Solving Employee Timetabling Problems by Generalized Local Search.

Sommario/riassunto

This book contains the extended versions of 33 papers selected among those originally presented at the Sixth Congress of the Italian Association for Artificial Intelligence (AI*IA). The congress of the AI*IA is the most relevant Italian event in the field of Artificial Intelligence. and has been receiving much attention from many researchers and practitioners of different countries. The sixth congress was held in Bologna, 14-17 September 1999, and was organized in twelve scientific sessions and one demo session. The papers here collected report on significant work carried out in different areas of artificial intelligence, in Italy and other countries. Areas such as automated reasoning, knowledge representation, planning, and machine learning continue to be thoroughly investigated. The collection also shows a growing interest in the field of multi-agent systems, perception and robotics, and temporal reasoning. Many people contributed in different ways to the success of the congress and to this volume. First of all, the members of the program committee who efficiently handled the reviewing of the 64 papers submitted to the congress, and later on the reviewing of the 41 papers submitted for publication in this volume. They provided three reviews for each manuscript, by relying on the support of valuable additional reviewers. The members of the organizing committee, namely Rosangela Barruffi, Paolo Bellavista, Anna Ciampolini, Marco Cremonini, Enrico Denti, Marco Gavanelli, Mauro Gaspari, Michela Milano, Rebecca Montanari, Andrea Omicini, Fabrizio Riguzzi, Cesare Stefanelli, and Paolo Torroni, worked hardy supporting at solving problems during and after the congress.