1. Record Nr. UNINA9910483197403321

Titolo	Inductive Logic Programming : 15th International Conference, ILP 2005, Bonn, Germany, August 10-13, 2005, Proceedings / / edited by Stefan Kramer, Bernhard Pfahringer
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (XIV, 434 p.)
Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 3625
Altri autori (Persone)	KramerStefan, Prof. Dr. PfahringerBernhard
Disciplina	005.1/15
Soggetti	Software engineering Artificial intelligence Computer programming Machine theory Algorithms Software Engineering Artificial Intelligence Programming Techniques Formal Languages and Automata 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 index.
Nota di contenuto	Research Papers -- An Output-Polynomial Time Algorithm for Mining Frequent Closed Attribute Trees -- Guiding Inference Through Relational Reinforcement Learning -- Converting Semantic Meta-knowledge into Inductive Bias -- Learning Teleoreactive Logic Programs from Problem Solving -- A Framework for Set-Oriented Computation in Inductive Logic Programming and Its Application in Generalizing Inverse Entailment -- Distance Based Generalisation -- Automatic Induction of Abduction and Abstraction Theories from Observations -- Logical Bayesian Networks and Their Relation to Other Probabilistic Logical Models -- Strategies to Parallelize ILP Systems -- Inducing Causal Laws by Regular Inference -- Online Closure-Based Learning of Relational Theories -- Learning Closed Sets of Labeled Graphs for

Chemical Applications -- ILP Meets Knowledge Engineering: A Case Study -- Spatial Clustering of Structured Objects -- Generalization Behaviour of Alkemic Decision Trees -- Predicate Selection for Structural Decision Trees -- Induction of the Indirect Effects of Actions by Monotonic Methods -- Probabilistic First-Order Theory Revision from Examples -- Inductive Equivalence of Logic Programs -- Deriving a Stationary Dynamic Bayesian Network from a Logic Program with Recursive Loops -- A Study of Applying Dimensionality Reduction to Restrict the Size of a Hypothesis Space -- Polynomial Time Inductive Inference of TTSP Graph Languages from Positive Data -- Classifying Relational Data with Neural Networks -- Efficient Sampling in Relational Feature Spaces -- Invited Papers -- Why Computers Need to Learn About Music -- Tutorial on Statistical Relational Learning -- Machine Learning for Systems Biology -- Five Problems in Five Areas for Five Years.

Sommario/riassunto

1 “Change is inevitable.” Embracing this quote we have tried to carefully exp- iment with the format of this conference, the 15th International Conference on Inductive Logic Programming, hopefully making it even better than it already was. But it will be up to you, the inquisitive reader of this book, to judge our success. The major changes comprised broadening the scope of the conference to include more diverse forms of non-propositional learning, to once again have tutorials on exciting new areas, and, for the ?rst time, to also have a discovery challenge as a platform for collaborative work. This year the conference was co-located with ICML 2005, the 22nd Inter- tional Conference on Machine Learning, and also in close proximity to IJCAI 2005, the 19th International Joint Conference on Arti?cial Intelligence. - location can be tricky, but we greatly bene?ted from the local support provided by Codrina Lauth, Michael May, and others. We were also able to invite all ILP and ICML participants to shared events including a poster session, an invited talk, and a tutorial about the exciting new area of “statistical relational lea- ing”. Two more invited talks were exclusively given to ILP participants and were presented as a kind of stock-taking—?ttingly so for the 15th event in a series—but also tried to provide a recipe for future endeavours.