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Titolo	Foundations of Inductive Logic Programming [[electronic resource] /] / by Shan-Hwei Nienhuys-Cheng, Ronald de Wolf
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Collana	Lecture Notes in Artificial Intelligence ; ; 1228
Disciplina	005.1/15
Soggetti	Software engineering Artificial intelligence Logic, Symbolic and mathematical Computer programming Software Engineering/Programming and Operating Systems Artificial Intelligence Mathematical Logic and Formal Languages Programming Techniques
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Nota di contenuto	Propositional logic -- First-order logic -- Normal forms and Herbrand models -- Resolution -- Subsumption theorem and refutation completeness -- Linear and input resolution -- SLD-resolution -- SLDNF-resolution -- What is inductive logic programming? -- The framework for model inference -- Inverse resolution -- Unfolding -- The lattice and cover structure of atoms -- The subsumption order -- The implication order -- Background knowledge -- Refinement operators -- PAC learning -- Further topics.
Sommario/riassunto	Inductive Logic Programming is a young and rapidly growing field combining machine learning and logic programming. This self-contained tutorial is the first theoretical introduction to ILP; it provides the reader with a rigorous and sufficiently broad basis for future research in the area. In the first part, a thorough treatment of first-order logic, resolution-based theorem proving, and logic programming is given. The second part introduces the main concepts of ILP and

systematically develops the most important results on model inference, inverse resolution, unfolding, refinement operators, least generalizations, and ways to deal with background knowledge. Furthermore, the authors give an overview of PAC learning results in ILP and of some of the most relevant implemented systems.

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