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Titolo	Knowledge Representation and Organization in Machine Learning [[electronic resource] /] / edited by Katharina Morik
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ISBN	3-540-46081-0
Edizione	[1st ed. 1989.]
Descrizione fisica	1 online resource (XVIII, 322 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 347
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Nota di contenuto	Explanation: A source of guidance for knowledge representation -- (Re) presentation issues in second generation expert systems -- Some aspects of learning and reorganization in an analogical representation -- A knowledge-intensive learning system for document retrieval -- Constructing expert systems as building mental models or toward a cognitive ontology for expert systems -- Sloppy modeling -- The central role of explanations in disciple -- An inference engine for representing multiple theories -- The acquisition of model-knowledge for a model-driven machine learning approach -- Using attribute dependencies for rule learning -- Learning disjunctive concepts -- The use of analogy in incremental SBL -- Knowledge base refinement using apprenticeship learning techniques -- Creating high level knowledge structures from simple elements -- Demand-driven concept formation.
Sommario/riassunto	Machine learning has become a rapidly growing field of Artificial Intelligence. Since the First International Workshop on Machine Learning in 1980, the number of scientists working in the field has been increasing steadily. This situation allows for specialization within the field. There are two types of specialization: on subfields or, orthogonal to them, on special subjects of interest. This book follows the thematic orientation. It contains research papers, each of which throws light upon the relation between knowledge representation, knowledge acquisition and machine learning from a different angle.

Building up appropriate representations is considered to be the main concern of knowledge acquisition for knowledge-based systems throughout the book. Here machine learning is presented as a tool for building up such representations. But machine learning itself also states new representational problems. This book gives an easy-to-understand insight into a new field with its problems and the solutions it offers. Thus it will be of good use to both experts and newcomers to the subject.