Record Nr. UNISA996465937303316 Autore Bibel Wolfgang Titolo Fundamentals of Artificial Intelligence [[electronic resource]]: An Advanced Course / / by Wolfgang Bibel, A.W. Biermann, J.P. Delgrande, G. Huet, Philippe Jorrand, J. Mylopoulos, E. Shapiro, M.E. Stickel; edited by Wolfgang Bibel, Philippe Jorrand Berlin, Heidelberg: .: Springer Berlin Heidelberg: .: Imprint: Springer. Pubbl/distr/stampa , 1986 **ISBN** 3-540-39875-9 Edizione [1st ed. 1986.] Descrizione fisica 1 online resource (VII, 314 p.) Lecture Notes in Computer Science, , 0302-9743 ; ; 232 Collana Disciplina 006.3 Soggetti Artificial intelligence Computer programming Computer logic Mathematical logic Artificial Intelligence **Programming Techniques** Logics and Meanings of Programs Mathematical Logic and Formal Languages Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Knowledge representation: Features of knowledge -- Deduction and computation -- An introduction to automated deduction --Fundamental mechanisms in machine learning and inductive inference -- Methods of automated reasoning -- Term rewriting as a basis for the design of a functional and parallel programming language --Concurrent Prolog: A progress report. This volume contains the elaborated and harmonized versions of seven Sommario/riassunto lectures given at the first Advanced Course in Artificial Intelligence. held in Vignieu, France, in July 1985. Most of them were written in tutorial form; the book thus provides an extremely valuable guide to the fundamental aspects of Al. In the first part, Delgrande and

Mylopoulos discuss the concept of knowledge and its representation. The second part is devoted to the processing of knowledge. The

contribution by Huet shows that both computation and inference or deduction are just different aspects of the same phenomenon. The chapter written by Stickel gives a thorough and knowledgeable introduction to the most important aspects of deduction by some form of resolution. The kind of reasoning that is involved in inductive inference problem solving (or programming) from examples, and in learning, is covered by Biermann. The tutorial by Bibel covers the more important forms of knowledge processing that might play a significant role in common sense reasoning. The third part of the book focuses on logic programming and functional programming. Jorrand presents the language FP2, where term rewriting forms the basis for the semantics of both functional and parallel programming. In the last chapter, Shapiro gives an overview of the current state of concurrent PROLOG.