1. Record Nr. UNINA9910464730203321

Autore	Crama Yves <1958->
Titolo	Boolean functions : theory, algorithms, and applications / / Yves Crama, Peter L. Hammer [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2011
ISBN	1-107-21829-2 1-283-12720-2 1-139-07459-8 9786613127204 1-139-08139-X 1-139-07684-1 1-139-06880-6 1-139-07912-3 0-511-85200-2
Descrizione fisica	1 online resource (xxi, 687 pages) : digital, PDF file(s)
Collana	Encyclopedia of mathematics and its applications
Disciplina	511.3/24
Soggetti	Algebraic functions Algebra, Boolean
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Fundamental concepts and applications -- Boolean equations -- Prime implicants and minimal DNFs / Peter L. Hammer and Alexander Kogan -- Duality theory / Yves Crama and Kazuhisa Makino -- Quadratic functions / Bruno Simeone -- Horn functions / Endre Boros -- Orthogonal forms and shellability -- Regular functions -- Threshold functions -- Red-once functions / Martin C. Golumbic and Vladimir Gurvich -- Characterizations of special classes by functional equations / Lisa Hellerstein -- Partially defined Boolean functions / Toshihide Ibaraki -- Pseudo-Boolean functions -- Graphs and hypergraphs -- Algorithmic complexity -- JBool : a software tool / Claude Benzaken and Nadia Brauner.
Sommario/riassunto	Written by prominent experts in the field, this monograph provides the first comprehensive, unified presentation of the structural, algorithmic

and applied aspects of the theory of Boolean functions. The book focuses on algebraic representations of Boolean functions, especially disjunctive and conjunctive normal form representations. This framework looks at the fundamental elements of the theory (Boolean equations and satisfiability problems, prime implicants and associated short representations, dualization), an in-depth study of special classes of Boolean functions (quadratic, Horn, shellable, regular, threshold, read-once functions and their characterization by functional equations) and two fruitful generalizations of the concept of Boolean functions (partially defined functions and pseudo-Boolean functions). Several topics are presented here in book form for the first time. Because of the depth and breadth and its emphasis on algorithms and applications, this monograph will have special appeal for researchers and graduate students in discrete mathematics, operations research, computer science, engineering and economics.

2. Record Nr. UNISA996466321803316

Titolo	Inductive Logic Programming [[electronic resource]] : 26th International Conference, ILP 2016, London, UK, September 4-6, 2016, Revised Selected Papers / / edited by James Cussens, Alessandra Russo
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-63342-2
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVII, 133 p. 44 illus.)
Collana	Lecture Notes in Artificial Intelligence ; ; 10326
Disciplina	005.115
Soggetti	Artificial intelligence Mathematical logic Computer programming Computer logic Data mining Artificial Intelligence Mathematical Logic and Formal Languages Programming Techniques Logics and Meanings of Programs Data Mining and Knowledge Discovery
Lingua di pubblicazione	Inglese

Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Predicate invention -- Graph-based learning -- Spatial learning -- Logical foundations -- Statistical relational learning.-Probabilistic ILP -- Implementation and scalability -- Applications in robotics, cyber security and games.
Sommario/riassunto	This book constitutes the thoroughly refereed post-conference proceedings of the 26th International Conference on Inductive Logic Programming, ILP 2016, held in London, UK, in September 2016. The 10 full papers presented were carefully reviewed and selected from 29 submissions. The papers represent well the current breath of ILP research topics such as predicate invention; graph-based learning; spatial learning; logical foundations; statistical relational learning; probabilistic ILP; implementation and scalability; applications in robotics, cyber security and games.