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Soggetti	Computer programming Computer logic Software engineering Mathematical logic Algorithms Computer communication systems Programming Techniques Logics and Meanings of Programs Software Engineering Mathematical Logic and Formal Languages Algorithm Analysis and Problem Complexity Computer Communication Networks
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	On Yuri Gurevich -- Yuri, Logic, and Computer Science -- Database Theory, Yuri, and Me -- Technical Papers -- Tracking Evidence -- Strict Canonical Constructive Systems -- Decidable Expansions of Labelled Linear Orderings -- Existential Fixed-Point Logic, Universal Quantifiers, and Topoi -- Three Paths to Effectiveness -- The Quest for a Tight Translation of Büchi to co-Büchi Automata -- Normalization of Some Extended Abstract State Machines -- Finding Reductions Automatically

-- On Complete Problems, Relativizations and Logics for Complexity Classes -- Effective Closed Subshifts in 1D Can Be Implemented in 2D -- The Model Checking Problem for Prefix Classes of Second-Order Logic: A Survey -- A Logic for PTIME and a Parameterized Halting Problem -- Inferring Loop Invariants Using Postconditions -- ASMs and Operational Algorithmic Completeness of Lambda Calculus -- Fixed-Point Definability and Polynomial Time on Chordal Graphs and Line Graphs -- Ibn S?n? on Analysis: 1. Proof Search. Or: Abstract State Machines as a Tool for History of Logic -- Abstract State Machines and the Inquiry Process -- The Algebra of Adjacency Patterns: Rees Matrix Semigroups with Reversion -- Definability of Combinatorial Functions and Their Linear Recurrence Relations -- Halting and Equivalence of Program Schemes in Models of Arbitrary Theories -- Metrization Theorem for Space-Times: From Urysohn's Problem towards Physically Useful Constructive Mathematics -- Thirteen Definitions of a Stable Model -- DKAL and Z3: A Logic Embedding Experiment -- Decidability of the Class E by Maslov's Inverse Method -- Logics for Two Fragments beyond the Syllogistic Boundary -- Choiceless Computation and Symmetry -- Hereditary Zero-One Laws for Graphs -- On Monadic Theories of Monadic Predicates.

Sommario/riassunto

Yuri Gurevich has played a major role in the discovery and development of applications of mathematical logic to theoretical and practical computer science. His interests have spanned a broad spectrum of subjects, including decision procedures, the monadic theory of order, abstract state machines, formal methods, foundations of computer science, security, and much more. In May 2010, Yuri celebrated his 70th birthday. To mark that occasion, on August 22, 2010, a symposium was held in Brno, the Czech Republic, as a satellite event of the 35th International Symposium on Mathematical Foundations of Computer Science (MFCS 2010) and of the 19th EACSL Annual Conference on Computer Science Logic (CSL 2010). The meeting received generous support from Microsoft Research. In preparation for this 70th birthday event, we asked Yuri's colleagues (whether or not they were able to attend the symposium) to contribute to a volume in his honor. This book is the result of that effort. The collection of articles herein begins with an academic biography, an annotated list of Yuri's publications and reports, and a personal tribute by Jan Van den Bussche. These are followed by 28 technical contributions. These articles – though they cover a broad range of topics – represent only a fraction of Yuri's multiple areas of interest. Each contribution was reviewed by one or two readers. In this regard, the editors wish to thank several anonymous individuals for their assistance.
