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Nota di contenuto	Monadic second order logic -- Alternating automata -- Star-free languages -- Omega-regular languages -- Büchi automata -- Parity games -- Tree automata.
Sommario/riassunto	This book introduces the reader into the field of automata theory and logic. It studies fundamental properties like complementation and determinisation of automata on infinite words and trees, and presents their applications for logics used in program verification. The presentation of such concepts – some of which are 50 years old or more – is given in a modern style and is accompanied by many exercises. The book can be used for self-study or as a basis for a graduate course on automata and logic, presupposing knowledge on finite automata and regular languages of finite words only. Contents Monadic second-order logic Alternating automata Star-free languages

Omega-regular languages Büchi automata Parity games Tree automata The Authors Martin Hofmann held the chair for theoretical computer science at LMU Munich, Germany. He made significant contributions to logic in computer science including type theory, semantics, program analysis and complexity theory. Martin Lange works on foundations of program verification using temporal logics and games. He is head of the department of theoretical computer science and formal methods at the University of Kassel, Germany.