Record Nr. UNINA9910783144503321 A half-century of automata theory [[electronic resource]]: celebration Titolo and inspiration / / editors, A. Salomaa, D. Wood, S. Yu Pubbl/distr/stampa River Edge, N.J., : World Scientific, c2001 **ISBN** 1-281-95168-4 9786611951689 981-281-016-1 Descrizione fisica 1 online resource (164 p.) Altri autori (Persone) SalomaaArto WoodDerick <1940-> YuSheng Disciplina 511.3 Soggetti Machine theory Algebra Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references. Nota di bibliografia Nota di contenuto **CONTENTS** : Preface ; Hazard Algebras (Extended Abstract) ; 1 Introduction ; 2 ; 3 Change-Counting Algebra **Transients** ; 4 Counting Changes to a Threshold ; 5 Circuit Simulations ; 6 Extensions of Boolean **Functions** ; 7 Complexity Issues : 8 Conclusions : References Undecidability and Incompleteness Results in Automata Theory ; 2 Basic Concepts and II2-Completeness; 3 1 Introduction Undecidability and Incompleteness Results : 4 Representation Independent Incompleteness Results ; 5 Incomplete Languages ; 6 Minimal Automata and Incompleteness : 7 Succinctness Results 8 Conclusion ; Automata Theory: Its References Past and Future : 1 Introduction ; 2 Beginnings of Automata Theory ; 3 External **Changes Impacting Future Directions** ; 4 Conclusions ; Forty Years of ; References

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## Sommario/riassunto

This volume gathers lectures by 8 distinguished pioneers of automata theory, including two Turing Award winners. In each contribution, the early developments of automata theory are reminisced about and future directions are suggested. Although some of the contributions go into rather intriguing technical details, most of the book is accessible to a wide audience interested in the progress of the age of computers. The book is a must for professionals in theoretical computer science and related areas of mathematics. For students in these areas it provides an exceptionally deep view at the begi