Record Nr. UNISA996465297403316 Algorithms and Applications [[electronic resource]]: Essays Dedicated **Titolo** to Esko Ukkonen on the Occasion of His 60th Birthday / / edited by Tapio Elomaa, Heikki Mannila, Pekka Orponen Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2010 **ISBN** 1-280-38626-6 9786613564184 3-642-12476-3 Edizione [1st ed. 2010.] 1 online resource (X, 261 p. 65 illus.) Descrizione fisica Theoretical Computer Science and General Issues, , 2512-2029 ; ; 6060 Collana Disciplina 006.4 Soggetti Pattern recognition systems Artificial intelligence Algorithms Application software Data mining User interfaces (Computer systems) Human-computer interaction **Automated Pattern Recognition** Artificial Intelligence Computer and Information Systems Applications Data Mining and Knowledge Discovery User Interfaces and Human Computer Interaction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. String Rearrangement Metrics: A Survey -- Maximal Words in Sequence Nota di contenuto Comparisons Based on Subword Composition -- Fast Intersection Algorithms for Sorted Sequences -- Indexing and Searching a Mass Spectrometry Database -- Extended Compact Web Graph Representations -- A Parallel Algorithm for Fixed-Length Approximate String-Matching with k-mismatches -- Covering Analysis of the Greedy

Algorithm for Partial Cover -- From Nondeterministic Suffix Automaton

to Lazy Suffix Tree -- Clustering the Normalized Compression Distance for Influenza Virus Data -- An Evolutionary Model of DNA Substring Distribution -- Indexing a Dictionary for Subset Matching Queries -- Transposition and Time-Scale Invariant Geometric Music Retrieval -- Unified View of Backward Backtracking in Short Read Mapping -- Some Applications of String Algorithms in Human-Computer Interaction -- Approximate String Matching with Reduced Alphabet -- ICT4D: A Computer Science Perspective -- Searching for Linear Dependencies between Heart Magnetic Resonance Images and Lipid Profiles -- The Support Vector Tree.

## Sommario/riassunto

For many years Esko Ukkonen has played a major role in the advancement of computer science in Finland. He was the key person in the development of the school of algorithmic research and has contributed considerably to post-graduate education in his country. Esko Ukkonen has over the years worked within many areas of computer science, including numerical methods, complexity theory, theoretical aspects of compiler construction, and logic programming. However, the main focus of his research has been on algorithms and their applications. This Festschrift volume, published to honor Esko Ukkonen on his 60th birthday, includes 18 refereed contributions by his former PhD students and colleagues, with whom he has cooperated closely during the course of his career. The Festschrift was presented to Esko during a festive symposium organized at the University of Helsinki to celebrate his birthday. The essays primarily present research on computational pattern matching and string algorithms, two areas that have benefited significantly from the work of Esko Ukonen.