THE ROLE OF THEORY IN COMPUTER SCIENCE
Essays Dedicated to Janusz Brzozowski

Edited by Stavros Konstantinidis (Saint Mary’s University, Halifax, Canada), Nelma Moreira (University of Porto, Portugal), Rogério Reis (University of Porto, Portugal) & Jeffrey Shallit (Waterloo University, Canada)

Key Feature:
- Prominent authors with a variety of research interests in theoretical computer science

Description:
This review volume brings together the works of several prominent researchers who had collaborated with Janusz Brzozowski in area of regular expressions and on syntactic semigroups of formal languages, as well as Brzozowski conjecture, dot-depth hierarchy, Communicating Sequential Processes (CSP) and DFA minimization.

Contributors of this review volume include Zoltán Ésik, Helmut Jorgensen, Markus Holzer, Martin Kutrib, Ernst Leiss, Jean-Éric Pin, Grzegorz Rozenberg, Arto Salomaa, Kai Salomaa, Andrew Szilard and Bruce Watson.
Contents:

• Solving Fixed Point Equations Over Complete Semirings
• The Arduous Road of Modelling
• Structure and Complexity of Some Subregular Language Families
• Is Complementation Evil? Open Problems about Regular Languages, 35 Years Later
• The Dot-Depth Hierarchy, 45 Years Later
• Depth of Closed Classes of Truth Functions in Many-Valued Logic
• Quasi-Distances and Weighted Finite Automata
• Programming Examples of Space-Filling Curves
• Exploration Systems: Combining Static Knowledge with Dynamic Processes
• CSP for Parallelising Brzozowski’s DFA Construction Algorithm