

1. Record Nr.	UNISA996466095503316
Titolo	Foundations of Computer Science [[electronic resource]] : Potential-Theory-Cognition / / edited by Christian Freksa, Matthias Jantzen, Rüdiger Valk
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1997
ISBN	3-540-69640-7
Edizione	[1st ed. 1997.]
Descrizione fisica	1 online resource (XII, 524 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1337
Disciplina	004
Soggetti	Computers Artificial intelligence Software engineering Computers and civilization Theory of Computation Artificial Intelligence Software Engineering/Programming and Operating Systems Computers and Society
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	The might of formulas and their limits -- Hardware — Software -- Defining discipline -- Computer science as cultural development -- Towards adjusting informatics education to information era -- Informatics and society: A curriculum for distance education -- Syntactic and semantic aspects of parallelism -- Unique fixpoints in complete lattices with applications to formal languages and semantics -- On abstract families of languages, power series, and elements -- Are there formal languages complete for $\text{SymSPACE}(\log n)$? -- On twist-closed trios: A new morphic characterization of r.e. sets -- An automata approach to some problems on context-free grammars -- On aperiodic sets of Wang tiles -- Closure under complementation of logspace complexity classes - A survey - -- A relation between sparse and printable sets in $\text{NSPACE}(\log n)$ -- A foundation for computable analysis -- A computer scientist's view of life, the universe, and

everything -- Calendars and chronologies -- A uniform approach to Petri Nets -- Observing partial order runs of Petri Nets -- Representation theorems for Petri Nets -- A remark on trace equations -- Verification of distributed algorithms with algebraic Petri Nets -- A short story on action refinement -- Interactive and reactive systems: States, observations, experiments, input, output, nondeterminism, compositionality and all that -- Discrete time analysis of a state dependent tandem with different customer types -- How distributed algorithms play the token game -- The asynchronous stack revisited: Rounds set the twilight reeling -- Online scheduling of continuous media streams -- Contribution to Goodenough's and Gerhart's theory of software testing and verification: Relation between strong compiler test and compiler implementation verification -- On the arrangement complexity of uniform trees -- A relational-functional integration for declarative programming -- Inside and outside the Chinese room -- Abstract structures in spatial cognition -- Spatial and temporal structures in cognitive processes -- Qualitative vs. Fuzzy representations of spatial distance -- What's a part? On formalizing part-whole relations -- SPOCK: A feasibility study on the completeness of parts lists -- Decision support systems with adaptive reasoning strategies -- Knowledge discovery in databases — An inductive logic programming approach -- The composition heuristic -- The job assignment problem: A study in parallel and distributed machine learning -- Self-improving behavior arbitration -- Neural networks for manipulator path planning -- Path planning using a subgoal graph -- A nonlinear markovian characterization of time series using neural networks -- Feature-based perception of semantic concepts -- Automatic detection of thesaurus relations for information retrieval applications -- InfoSphere ? -V: a new approach to 3D-visualization of information.

Sommario/riassunto

This book constitutes an anthology of refereed papers arranged to acknowledge the work of Wilfried Brauer on the occasion of his sixtieth birthday. The volume presents 49 revised refereed papers organized in topical sections on computer science and its potential, social implications of computer science, formal languages and automata, structures and complexity theory, Petri nets, systems analysis and distributed systems, software engineering and verification, cognition and artificial intelligence, knowledge representation and reasoning, machine learning, neural networks and robotics, language and information systems.
