Record Nr. UNINA9910767575703321 SOFSEM 2001: Theory and Practice of Informatics: 28th Conference on **Titolo** Current Trends in Theory and Practice of Informatics Piestany, Slovak Republic, November 24 - December 1, 2001. Proceedings / / edited by Leszek Pacholski, Peter Ruzicka Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2001 **ISBN** 3-540-45627-9 Edizione [1st ed. 2001.] Descrizione fisica 1 online resource (X, 350 p.) Collana Lecture Notes in Computer Science, , 0302-9743 ; ; 2234 Disciplina 001.64 Soggetti Software engineering Computers Computer communication systems Artificial intelligence Computer science—Mathematics Software Engineering/Programming and Operating Systems Theory of Computation Computer Communication Networks Artificial Intelligence Mathematics of Computing Information Systems and Communication Service 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 at the end of each chapters and index. Nota di contenuto Invited Talks -- The Potential of Grid, Virtual Laboratories and Virtual Organizations for Bio-sciences -- Agreement Problems in Fault-Tolerant Distributed Systems -- Negotiating the Semantic Gap: From Feature Maps to Semantic Landscapes -- Inference in Rule-Based Systems by Interpolation and Extrapolation Revisited -- Recent Advances in Wavelength Routing -- From Metacomputing to Grid Computing: Evolution or Revolution? -- Knowledge-Based Control Systems -- Beyond the Turing Limit: Evolving Interactive Systems --Distributed Computations by Autonomous Mobile Robots -- Formal

Verification Methods for Industrial Hardware Design -- How Can Computer Science Contribute to Knowledge Discovery -- Contributed Papers -- On the Approximability of Interactive Knapsack Problems --Model Checking Communication Protocols -- Pipelined Decomposable BSP Computers -- Quantum versus Probabilistic One-Way Finite Automata with Counter -- How to Employ Reverse Search in Distributed Single Source Shortest Paths -- Multi-agent Systems as Concurrent Constraint Processes -- ADST: An Order Preserving Scalable Distributed Data Structure with Constant Access Costs -- Approximative Learning of Regular Languages -- Quantum Finite State Transducers --Lemmatizer for Document Information Retrieval Systems in JAVA -- The Reconstruction of Polyominoes from Approximately Orthogonal Projections -- Bounding Lamport's Bakery Algorithm -- Fast Independent Component Analysis in Kernel Feature Spaces -- On Majority Voting Games in Trees -- Time and Space Complexity of Reversible Pebbling -- The HiQoS Rendering System -- Two-Way Restarting Automata and J-Monotonicity -- P-Hardness of Equivalence Testing on Finite-State Processes -- Keynote Talk -- Software Geography: Physical and Economic Aspects.

Sommario/riassunto

SOFSEM 2001, the International Conference on Current Trends in Theory and Practice of Informatics, was held on November 24 – December 1, 2001 in the ? well-known spa Pie?stany, Slovak Republic. This was the 28th annual conference in the SOFSEM series organized either in the Slovak or the Czech Republic. SOFSEM has a wellestablished tradition. Currently it is a broad, multid-ciplinary conference, devoted to the theory and practice of software systems. Its aim is to foster cooperation among professionals from academia and industry working in various areas of informatics. The scienti?c program of SOFSEM consists of invited talks, which determine the topics of the conference, and short contributed talks presenting original - sults. The topics of the invited talks are chosen so as to cover the whole range from theory to practice and to bring interesting research areas to the attention of conference participants. For the year 2001, the following three directions were chosen for presentation by the SOFSEM Steering Committee: - Trends in Informatics - Enabling Technologies for Global Computing – Practical Systems Engineering and Applications The above directions were covered through 12 invited talks presented by pronent researchers. There were 18 contributed talks, selected by the international Program Committee from among 46 submitted papers. The conference was also accompanied by workshops on Electronic Commerce Systems (coordinated by H. D. Zimmermann) and Soft Computing (coordinated by P. H'ajek).