Record Nr. UNINA9910484946603321 Perspectives of Systems Informatics [[electronic resource]]: 7th **Titolo** International Andrei Ershov Memorial Conference, PSI 2009, Novosibirsk, Russia, June 15-19, 2009, Revised Papers / / edited by Amir Pnueli, Irina Virbitskaite, Andrei Voronkov Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2010 **ISBN** 1-280-38552-9 9786613563446 3-642-11486-5 Edizione [1st ed. 2010.] 1 online resource (XIII, 426 p.) Descrizione fisica Collana Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5947 Classificazione SS 4800 Disciplina 005.1 Soggetti Software engineering Computer science Compilers (Computer programs) Computer programming Software Engineering Computer Science Logic and Foundations of Programming Compilers and Interpreters Programming Techniques 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. Nota di contenuto Invited Talks -- Games, Interaction and Computation -- Rôle of Domain Engineering in Software Development—Why Current Requirements Engineering Is Flawed! -- Compositional and Quantitative Model Checking (Extended Abstract) -- Invariants, Modularity, and Rights -- Distributed Embedded Systems: Reconciling Computation, Communication and Resource Interaction -- Regular Papers -- Simulation of Kohn's Molecular Interaction Maps through Translation into Stochastic CLS+ -- A Two-Level Approach for Modeling and Verification of Telecommunication Systems -- SVM Paradoxes -- Indexing Dense Nested Metric Spaces for Efficient Similarity Search -- On the Containment Problem for Queries in

Conjunctive Form with Negation -- Towards a Scalable, Pragmatic Knowledge Representation Language for the Web -- An Experiment with the Fourth Futamura Projection -- Extracting the Essence of Distillation -- Establishing Linux Driver Verification Process -- A Method for Test Suite Reduction for Regression Testing of Interactions between Software Modules -- A Java Supercompiler and Its Application to Verification of Cache-Coherence Protocols -- Proving the Equivalence of Higher-Order Terms by Means of Supercompilation --Unifying the Semantics of UML 2 State. Activity and Interaction Diagrams -- Applicability of the BLAST Model Checker: An Industrial Case Study -- ? K -constraints for Hybrid Systems -- A Complete Invariant Generation Approach for P-solvable Loops -- Standardization and Testing of Mathematical Functions -- Using AOP for Discovering and Defining Executable Test Cases -- Cryptographic Protocols Analysis in Event B -- A Query Language for Logic Architectures --Planet Map Generation by Tetrahedral Subdivision -- Towards Checking Parametric Reachability for UML State Machines -- A Flexible Approach to Automated Development of Cross Toolkits for Embedded Systems --A Technique for Information Retrieval from Microformatted Websites --From Dynamic to Static and Back: Riding the Roller Coaster of Information-Flow Control Research -- History-Dependent Stochastic Petri Nets -- Privacy Preserving Modules for Ontologies -- Symbolic Bounded Conformance Checking of Model Programs -- Multi-level Virtual Machine Debugging Using the Java Platform Debugger Architecture -- Anti-unification Algorithms and Their Applications in Program Analysis.

Sommario/riassunto

This book contains thoroughly refereed and revised papers from the 7th International Andrei Ershov Memorial Conference on Perspectives of System Informatics, PSI 2009, held in Akademgorodok, Novosibirsk, Russia, in June 2009. The 26 revised full papers and 4 revised short papers presented were carefully reviewed and selected from 67 submissions. The volume also contains 5 invited papers covering a range of hot topics in system informatics. The papers address all current aspects of theoretical computer science, programming methodology, and new information technologies, which are among the most important contributions of system informatics.