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Nota di contenuto	Dependable Cyber-Physical Systems -- From Finitely Many Simulations to Flowpipes -- Toward Automatic Verification of Quantum Programs -- Place Bisimulation and Liveness for Open Petri Nets -- Divergence Detection for CCSL Specification via Clock Causality Chain -- Performance Evaluation on Modern Concurrent Data Structures -- GPU-accelerated Steady-state Computation of Large Probabilistic Boolean Networks -- Behavioural Pseudometrics for Nondeterministic Probabilistic Systems -- A Comparison of Time- and Reward-Bounded Probabilistic Model Checking Techniques -- Computing Specification-Sensitive Abstractions for Program Verification -- Reducing State Explosion for Software Model Checking with Relaxed Memory

Consistency Models -- Identifying XML Schema Constraints Using Temporal Logic -- Schedulability Analysis of Timed Regular Tasks by Under-Approximation on WCET -- Importance Sampling for Stochastic Timed Automata -- Semipositivity in Separation Logic with Two Variables -- Distributed Computation of Fixed Points on Dependency Graphs -- A Complete Approximation Theory for Weighted Transition Systems -- Zephyrus2: On the Fly Deployment Optimization Using SMT and CP Technologies -- Exploiting Symmetry for Efficient Verification of Infinite-state Component-based Systems -- Formalization of Fault Trees in Higher-order Logic: A Deep Embedding Approach -- An Efficient Synthesis Algorithm for Parametric Markov Chains Against Linear Time Properties -- Time-bounded Statistical Analysis of Resource-constrained Business Processes with Distributed Probabilistic Systems -- Failure Estimation of Behavioral Specifications. .

Sommario/riassunto

This book constitutes the refereed proceedings of the Second International Symposium on Dependable Software Engineering: Theories, Tools, and Applications, SETTA 2016, held in Beijing, China, in November 2016. The 17 full papers presented together with 3 short papers were carefully reviewed and selected from 58 submissions. The aim of the symposium is to bring together international researchers and practitioners in the field of software technology. Its focus is on formal methods and advanced software technologies, especially for engineering complex, large-scale artifacts like cyber-physical systems, networks of things, enterprise systems, or cloud-based services. .