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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Section 1: Invited Talks -- Hazards of Verification -- Automata-Theoretic Model Checking Revisited -- Proofs, Interpolants, and Relevance Heuristics -- Is Verification Getting Too Complex? -- Can Mutation Analysis Help Fix Our Broken Coverage Metrics? -- Practical Considerations Concerning HL-to -RT Equivalence Checking -- Section 2: Regular Papers -- A Framework for Inherent Vacuity -- A Meta Heuristic for Effectively Detecting Concurrency Errors -- A Uniform Approach to Three-Valued Semantics for λ -Calculus on Abstractions of Hybrid Automata -- Automatic Boosting of Cross-Product Coverage Using Bayesian Networks -- Efficient Decision Procedure for Bounded Integer Non-linear Operations Using SMT() -- Evaluating Workloads Using Comparative Functional Coverage -- Iterative Delta Debugging -- Linear-Time Reductions of Resolution Proofs -- Significant Diagnostic Counterexamples in Probabilistic Model Checking -- Statistical Model Checking of Mixed-Analog Circuits with an Application to a Third Order ?????? Modulator -- Structural Contradictions -- Synthesizing Test Models from Test Cases -- Section 3: Tool Papers -- d-TSR: Parallelizing SMT-Based BMC Using Tunnels over a Distributed Framework -- Progress in Automated Software Defect Prediction -- SeeCode – A Code Review Plug-in for Eclipse -- User-Friendly Model

Sommario/riassunto

This book constitutes the thoroughly refereed post-conference proceedings of the 4th International Haifa Verification Conference, HVC 2008, held in Haifa, Israel in October 2008. The 12 revised full papers and 4 tool papers presented together with 6 invited lectures were carefully reviewed and selected from 49 initial submissions. The papers address all current issues, challenges and future directions of verification for hardware, software, and hybrid systems and present academic research in the verification of systems, generally divided into two paradigms - formal verification and dynamic verification (testing). Within each paradigm, different algorithms and techniques are used for hardware and software systems with a special focus on hybrid methods.
