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Soggetti	Computer science Computer engineering Computer networks Logic programming Artificial intelligence - Data processing Software engineering Computer Science Logic and Foundations of Programming Computer Engineering and Networks Logic in AI Data Science Software Engineering
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Livello bibliografico	Monografia
Nota di contenuto	Witnessing Secure Compilation -- BackFlow: Backward Context-sensitive Flow Reconstruction of Taint Analysis Results -- Fixing Code That Explodes Under Symbolic Evaluation -- The Correctness of a Code Generator for a Functional Language -- Leveraging Compiler Intermediate Representation for Multi- and Cross-Language Verification -- Putting the Squeeze on Array Programs: Loop Verification via Inductive Rank Reduction -- A Systematic Approach to Abstract Interpretation of Program Transformations -- Sharing ghost variables in a collection of abstract domains -- Harnessing Static Analysis to Help Learn Pseudo-Inverses of String Manipulating

Procedures for Automatic Test Generation -- Synthesizing Environment Invariants for Modular Hardware Verification -- Systematic Classification of Attackers via Bounded Model Checking -- Cheap CTL Compassion in NuSMV -- A Cooperative Parallelization Approach for Property-Directed k-Induction -- Generalized Property-Directed Reachability for Hybrid Systems -- Language Inclusion for Finite Prime Event Structures -- Promptness and Bounded Fairness in Concurrent and Parameterized Systems -- Solving LIA* Using Approximations -- Formalizing and checking Multilevel Consistency -- Practical Abstractions for Automated Verification of Shared-Memory Concurrency -- How to Win First-Order Safety Games -- Improving Parity Game Solvers with Justifications.

Sommario/riassunto

This book constitutes the proceedings of the 21st International Conference on Verification, Model Checking, and Abstract Interpretation, VMCAI 2020. The 21 papers presented in this volume were carefully reviewed from 44 submissions. VMCAI provides a forum for researchers from the communities of verification, model checking, and abstract interpretation, facilitating interaction, cross-fertilization, and advancement of hybrid methods that combine these and related areas. .