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Descrizione fisica	1 online resource (482 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 13790
Disciplina	005.1 005.13
Soggetti	Computer science Computer engineering Computer networks Natural language processing (Computer science) Machine theory Compilers (Computer programs) Computer Science Logic and Foundations of Programming Computer Engineering and Networks Natural Language Processing (NLP) Formal Languages and Automata Theory Compilers and Interpreters
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talks -- Specification-Guided Reinforcement Learning -- Towards Efficient Reasoning of Quantum Programs -- Regular Papers -- Solving Invariant Generation for Unsolvable Loops -- Principles of Staged Static+Dynamic Partial Analysis -- SecWasm: Information Flow Control for WebAssembly -- Lifting Numeric Relational Domains to Algebraic Data Types -- Automated Synthesis of Asynchronizations -- Case Study on Verification-Witness Validators: Where We Are and Where We Go -- Deciding program properties via complete abstractions on bounded domains -- Invariant Inference With Provable Complexity From the Monotone Theory -- Efficient Modular SMT-Based Model

Checking of Pointer Programs -- Property-driven code obfuscations - Reinterpreting Jones-optimality in Abstract Interpretation -- Bootstrapping Library-Based Synthesis -- Boosting Robustness Verification of Semantic Feature Neighborhoods -- Fast and incremental computation of weak control closure -- Local Completeness Logic on Kleene Algebra with Tests -- Semantic Foundations for Cost Analysis of Pipeline-Optimized Programs -- Parameterized Recursive Renement Types for Automated Program Verification -- Adversarial Logic -- CLEVEREST: Accelerating CEGAR-based Neural Network Verification via Adversarial Attacks.

Sommario/riassunto

This book constitutes the refereed proceedings of the 29th International Symposium on Static Analysis, SAS 2022, held in Auckland, New Zealand, in December 2022. The 18 full papers included in this book were carefully reviewed and selected from 43 submissions. Static analysis is widely recognized as a fundamental tool for program verification, bug detection, compiler optimization, program understanding, and software maintenance. The papers deal with theoretical, practical and application advances in the area. .
