

1. Record Nr.	UNINA9910484634503321
Titolo	Static Analysis : 23rd International Symposium, SAS 2016, Edinburgh, UK, September 8-10, 2016, Proceedings // edited by Xavier Rival
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2016
ISBN	3-662-53413-4
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (X, 511 p. 175 illus.)
Collana	Programming and Software Engineering ; ; 9837
Disciplina	005.1
Soggetti	Algorithms Computer logic Software engineering Programming languages (Electronic computers) Mathematical logic Algorithm Analysis and Problem Complexity Logics and Meanings of Programs Software Engineering Programming Languages, Compilers, Interpreters Mathematical Logic and Formal Languages
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Quantitative Monitor Automata -- The Julia Static Analyzer for Java -- Automated Verification of Linearization Policies -- Structure-Sensitive Points-To Analysis for C and C -- Bounded Abstract Interpretation -- Completeness in Approximate Transduction -- Relational Verification through Horn clause transformation -- Securing A Compiler Transformation -- Exploiting sparsity in difference-bound matrices -- Flow- and Context-Sensitive Points-to Analysis using Generalized Points-to Graphs -- Learning a Variable-Clustering Strategy for Octagon From Labeled Data Generated by a Static Analysis -- Static Analysis by Abstract Interpretation of the Functional Correctness of Matrix Manipulating Program -- Generalized Homogeneous Polynomials for Efficient Template-Based Nonlinear Invariant -- On the linear ranking problem for simple floating-point loops -- Alive-FP:

Automated Verification of Floating Point Based Peephole Optimizations in LLVM -- A Parametric Abstract Domain for Lattice-Valued Regular Expressions -- Cell morphing: from array programs to array-free Horn clauses -- Loopy: Programmable and Formally Verified Loop Transformations -- Abstract Interpretation of Supermodular Games -- Validating Numerical Semidefinite Programming Solvers for Polynomial Invariants -- Enforcing Termination of Interprocedural Analysis -- From Array Domains to Abstract Interpretation under Store-Buffer-Based Memory Models -- Making k-Object-Sensitive Pointer Analysis More Precise with Still k-Limiting. .

Sommario/riassunto

This book constitutes the refereed proceedings of the 23rd International Static Analysis Symposium, SAS 2016, held in Edinburgh, UK, in September 2016. The 21 papers presented in this volume were carefully reviewed and selected from 55 submissions. The contributions cover a variety of multi-disciplinary topics in abstract domains; abstract interpretation; abstract testing; bug detection; data flow analysis; model checking; new applications; program transformation; program verification; security analysis; theoretical frameworks; and type checking.
