1. Record Nr. UNINA9910483165003321 Static analysis: 15th international symposium, SAS 2008, Valencia, **Titolo** Spain, July 16-18, 2008: proceedings / / Maria Alpuente, German Vidal (eds.) Berlin; New York, : Springer, c2008 Pubbl/distr/stampa 3-540-69166-9 **ISBN** [1st ed. 2008.] Edizione Descrizione fisica 1 online resource (X, 379 p.) Lecture notes in computer science., 0302-9743;;5079 Collana LNCS sublibrary. SL 2, Programming and software engineering Altri autori (Persone) AlpuenteMaria VidalGerman (German Francisco Vidal Oriola) Disciplina 005.1 Soggetti Computer programming Programming languages (Electronic computers) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Invited Papers -- Transforming Abstract Interpretations by Abstract Interpretation -- Reflections on the Role of Static Analysis in Cooperative Bug Isolation -- Contributed Papers -- Relational Analysis of Correlation -- Convex Hull of Arithmetic Automata -- Pointer Analysis, Conditional Soundness, and Proving the Absence of Errors --Protocol Inference Using Static Path Profiles -- Solving Multiple Dataflow Queries Using WPDSs -- Field Flow Sensitive Pointer and Escape Analysis for Java Using Heap Array SSA -- Typing Linear Constraints for Moding CLP() Programs -- On Polymorphic Recursion, Type Systems, and Abstract Interpretation -- Modal Abstractions of Concurrent Behaviour -- Hiding Software Watermarks in Loop Structures -- Inferring Min and Max Invariants Using Max-Plus Polyhedra -- Conflict Analysis of Programs with Procedures, Dynamic Thread Creation, and Monitors -- Automatic Inference of Upper Bounds for Recurrence Relations in Cost Analysis -- SLR: Path-Sensitive Analysis through Infeasible-Path Detection and Syntactic Language Refinement -- Flow Analysis, Linearity, and PTIME -- Quantum Entanglement Analysis Based on Abstract Interpretation -- Language Strength Reduction -- Analysing All Polynomial Equations in --

Splitting the Control Flow with Boolean Flags -- Reasoning about

Sommario/riassunto

Control Flow in the Presence of Transient Faults -- A Calculational Approach to Control-Flow Analysis by Abstract Interpretation -- Heap Decomposition for Concurrent Shape Analysis.

This book constitutes the refereed proceedings of the 15th International Symposium on Static Analysis, SAS 2008, held in Valencia, Spain in July 2008 - co-located with LOPSTR 2008, the International Symposium on Logic-based Program Synthesis and Transformation, PPDP 2008, the International ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming, and PLID 2008, the International Workshop on Programming Language Interference and Dependence. The 22 revised full papers presented together with two invited lectures were carefully reviewed and selected from 63 submissions. The papers address all aspects of static analysis including abstract domains, abstract interpretation, abstract testing, compiler optimizations, control flow analysis, data flow analysis, model checking, program specialization, security analysis, theoretical analysis frameworks, type based analysis, and verification systems.