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Disciplina	005.13
Soggetti	Programming languages (Electronic computers) Computer science Computer programming Software engineering Computer logic Logic, Symbolic and mathematical Programming Languages, Compilers, Interpreters Computer Science, general Programming Techniques Software Engineering Logics and Meanings of Programs Mathematical Logic and Formal Languages
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Nota di contenuto	Static Analysis of Object-Oriented Languages -- Precise Analysis of String Expressions -- Modular Class Analysis with DATALOG -- Class-Level Modular Analysis for Object Oriented Languages -- Static Analysis of Concurrent Languages -- Checking Interference with Fractional Permissions -- Message Analysis for Concurrent Languages -- Instantaneous Termination in Pure Esterel -- Stack Size Analysis for Interrupt-Driven Programs -- Invited Paper -- Program Development Using Abstract Interpretation (And the Ciao System Preprocessor) -- Static Analysis of Functional Languages -- Selective Tail Call Elimination -- Inserting Safe Memory Reuse Commands into ML-Like

Programs -- Static Analysis of Procedural Languages -- Weighted Pushdown Systems and Their Application to Interprocedural Dataflow Analysis -- Client-Driven Pointer Analysis -- Abstract Interpretation of Programs as Markov Decision Processes -- Static Data Analysis -- A Logic for Analyzing Abstractions of Graph Transformation Systems -- Type Systems for Distributed Data Sharing -- Z-Ranking: Using Statistical Analysis to Counter the Impact of Static Analysis Approximations -- Computer-Assisted Verification of a Protocol for Certified Email -- Invited Talk -- Craig Interpolation and Reachability Analysis -- Static Linear Relation Analysis -- Precise Widening Operators for Convex Polyhedra -- Cartesian Factoring of Polyhedra in Linear Relation Analysis -- Static Analysis Based Program Transformation -- Continuation-Based Partial Evaluation without Continuations -- Loop Transformations for Reducing Data Space Requirements of Resource-Constrained Applications -- Code Compaction of Matching Single-Entry Multiple-Exit Regions -- Static Heap Analysis -- Existential Heap Abstraction Entailment Is Undecidable -- Typestate Verification: Abstraction Techniques and Complexity Results -- Static Analysis of Accessed Regions in Recursive Data Structures -- Establishing Local Temporal Heap Safety Properties with Applications to Compile-Time Memory Management.

Sommario/riassunto

The refereed proceedings of the 10th International Symposium on Static Analysis, SAS 2003, held in San Diego, CA, USA in June 2003 as part of FCRC 2003. The 25 revised full papers presented together with two invited contributions were carefully reviewed and selected from 82 submissions. The papers are organized in topical sections on static analysis of object-oriented languages, static analysis of concurrent languages, static analysis of functional languages, static analysis of procedural languages, static data analysis, static linear relation analysis, static analysis based program transformation, and static heap analysis.
