

1. Record Nr.	UNISA996465700603316
Titolo	Compiler Construction [[electronic resource] ] : 14th International Conference, CC 2005, Held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS 2005, Edinburgh, UK, April 4-8, 2005. Proceedings / / edited by Rastislav Bodik
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (XII, 308 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 3443
Disciplina	005.4/53
Soggetti	Compilers (Computer programs) Computer science Machine theory Software engineering Artificial intelligence Compilers and Interpreters Computer Science Logic and Foundations of Programming Formal Languages and Automata Theory Software Engineering Artificial Intelligence
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 Talk -- When Abstraction Fails -- Compilation -- Source-Level Debugging for Multiple Languages with Modest Programming Effort -- Compilation of Generic Regular Path Expressions Using C++ Class Templates -- XML Goes Native: Run-Time Representations for Xtatic -- Parallelism -- Boosting the Performance of Multimedia Applications Using SIMD Instructions -- Task Partitioning for Multi-core Network Processors -- Experiences with Enumeration of Integer Projections of Parametric Polytopes -- Generalized Index-Set Splitting -- Memory Management -- Age-Oriented Concurrent Garbage Collection -- Optimizing C Multithreaded Memory Management Using Thread-Local Storage -- An Efficient On-the-Fly Cycle Collection -- Program

Transformations -- Data Slicing: Separating the Heap into Independent Regions -- A Compiler-Based Approach to Data Security -- Composing Source-to-Source Data-Flow Transformations with Rewriting Strategies and Dependent Dynamic Rewrite Rules -- Verification of Source Code Transformations by Program Equivalence Checking -- Tool Demonstrations -- Hob: A Tool for Verifying Data Structure Consistency -- Jazz: A Tool for Demand-Driven Structural Testing -- Tiger – An Interpreter Generation Tool -- CodeSurfer/x86—A Platform for Analyzing x86 Executables -- Pointer Analysis -- A Study of Type Analysis for Speculative Method Inlining in a JIT Environment -- Completeness Analysis for Incomplete Object-Oriented Programs -- Using Inter-Procedural Side-Effect Information in JIT Optimizations.

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## Sommario/riassunto

ETAPS 2005 was the eighth instance of the European Joint Conferences on Theory and Practice of Software. ETAPS is an annual federated conference that was established in 1998 by combining a number of existing and new conferences. This year it comprised five conferences (CC, ESOP, FASE, FOSSACS, TACAS), 17 satellite workshops (AVIS, BYTECODE, CEES, CLASE, CMSB, COCV, FAC, FESCA, FINCO, GCW-DSE, GLPL, LDTA, QAPL, SC, SLAP, TGC, UITP), seven invited lectures (not including those that were specific to the satellite events), and several tutorials. We received over 550 submissions to the five conferences this year, giving acceptance rates below 30% for each one. Congratulations to all the authors who made it to the final program! I hope that most of the other authors still found a way of participating in this exciting event and I hope you will continue submitting. The events that comprise ETAPS address various aspects of the system development process, including specification, design, implementation, analysis and improvement. The languages, methodologies and tools which support these activities are all well within its scope. Different blends of theory and practice are represented, with an inclination towards theory with a practical motivation on the one hand and soundly based practice on the other. Many of the issues involved in software design apply to systems in general, including hardware systems, and the emphasis on software is not intended to be exclusive.

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