1. Record Nr. UNISA996465799803316 Compiler Construction [[electronic resource]]: 15th International **Titolo** Conference, CC 2006, Held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS 2006, Vienna, Austria, March 30-31, 2006, Proceedings / / edited by Alan Mycroft, Andreas Zeller Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2006 **ISBN** 3-540-33051-8 Edizione [1st ed. 2006.] Descrizione fisica 1 online resource (XIII, 277 p.) Theoretical Computer Science and General Issues, , 2512-2029;; 3923 Collana Disciplina 005.4/5 Soggetti Computer science Compilers (Computer programs) Operating systems (Computers) Machine theory Software engineering Artificial intelligence Computer Science Logic and Foundations of Programming Compilers and Interpreters **Operating Systems** 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 -- Using Dependent Types to Port Type Systems to Low-Level Languages -- Program Analysis -- Interprocedural Dataflow Analysis in the Presence of Large Libraries -- Efficient Flow-Sensitive Interprocedural Data-Flow Analysis in the Presence of Pointers -- Path-Based Reuse Distance Analysis -- Context-Sensitive Points-to Analysis: Is It Worth It? -- Dynamic Analysis -- Selective Runtime Memory Disambiguation in a Dynamic Binary Translator -- Accurately Choosing

Execution Runs for Software Fault Localization -- Tool Demonstrations

-- Demonstration: On-Line Visualization and Analysis of Real-Time Systems with TuningFork -- Data-Flow Analysis as Model Checking Within the jABC -- The CGiS Compiler—A Tool Demonstration -- Optimization -- Loop Transformations in the Ahead-of-Time Optimization of Java Bytecode -- Hybrid Optimizations: Which Optimization Algorithm to Use? -- A Fresh Look at PRE as a Maximum Flow Problem -- Performance Characterization of the 64-bit x86 Architecture from Compiler Optimizations' Perspective -- Code Generation -- Lightweight Lexical Closures for Legitimate Execution Stack Access -- Polyhedral Code Generation in the Real World -- Iterative Collective Loop Fusion -- Converting Intermediate Code to Assembly Code Using Declarative Machine Descriptions -- Register Allocation -- SARA: Combining Stack Allocation and Register Allocation -- Register Allocation for Programs in SSA-Form -- Enhanced Bitwidth-Aware Register Allocation.

Sommario/riassunto

ETAPS 2006 was the ninth 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 ?ve conferences (CC, ESOP, FASE, FOSSACS, TACAS), 18 satellite workshops (AC- CAT, AVIS, CMCS, COCV, DCC, EAAI, FESCA, FRCSS, GT-VMT, LDTA, MBT, QAPL, SC, SLAP, SPIN, TERMGRAPH, WITS and WRLA), two tutorials, and seven invited lectures (not including those that were speci?c to the satellite events). We - ceived over 550 submissions to the ?ve conferences this year, giving an overall acc- tance rate of 23%, with acceptance rates below 30% for each conference. Congratu- tions to all the authors who made it to the ?nal programme! I hope that most of the other authorsstill founda 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 devel- ment process, including speci?cation, design, implementation, analysis and improment. The languages, methodologies and tools which support these activities are all well within its scope. Di?erent 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.