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Descrizione fisica	1 online resource (XII, 348 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2304
Disciplina	005.4/53
Soggetti	Programming languages (Electronic computers) Logic, Symbolic and mathematical Software engineering Artificial intelligence Computer logic Programming Languages, Compilers, Interpreters Mathematical Logic and Formal Languages Software Engineering Artificial Intelligence Logics and Meanings of Programs
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	Tool Demonstrations -- LISA: An Interactive Environment for Programming Language Development -- Building an Interpreter with Vmgen -- Compiler Construction Using LOTOS NT -- Analysis and Optimization -- Data Compression Transformations for Dynamically Allocated Data Structures -- Evaluating a Demand Driven Technique for Call Graph Construction -- A Graph—Free Approach to Data—Flow Analysis -- A Representation for Bit Section Based Analysis and Optimization -- Low-Level Analysis -- Online Subpath Profiling -- Precise Exception Semantics in Dynamic Compilation -- Decompiling Java Bytecode: Problems, Traps and Pitfalls -- Grammars and Parsing -- Forwarding in Attribute Grammars for Modular Language Design --

Disambiguation Filters for Scannerless Generalized LR Parsers --  
 Invited Talk -- Modular Static Program Analysis -- Domain-Specific  
 Languages and Tools -- StreamIt: A Language for Streaming  
 Applications -- Compiling Mercury to High-Level C Code -- CIL:  
 Intermediate Language and Tools for Analysis and Transformation of C  
 Programs -- Energy Consumption Optimizations -- Linear Scan  
 Register Allocation in the Context of SSA Form and Register Constraints  
 -- Global Variable Promotion: Using Registers to Reduce Cache Power  
 Dissipation -- Optimizing Static Power Dissipation by Functional Units  
 in Superscalar Processors -- Influence of Loop Optimizations on Energy  
 Consumption of Multi-bank Memory Systems -- Loop and Array  
 Optimizations -- Effective Enhancement of Loop Versioning in Java --  
 Value-Profile Guided Stride Prefetching for Irregular Code -- A  
 Comprehensive Approach to Array Bounds Check Elimination for Java.

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## Sommario/riassunto

ETAPS 2002 was the 7th 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 5 conferences (FOSSACS, FASE, ESOP, CC, TACAS), 13 satellite workshops (ACL2, AGT, CMCS, COCV, DCC, INT, LDFA, SC, SFEDL, SLAP, SPIN, TPTS, and VISS), 8 invited lectures (not including those specific to the satellite events), and several tutorials. 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 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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