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Disciplina	004.35
Soggetti	Programming languages (Electronic computers) Operating systems (Computers) Computer programming Computers Computer arithmetic and logic units Computer networks Programming Languages, Compilers, Interpreters Operating Systems Programming Techniques Computation by Abstract Devices Arithmetic and Logic Structures Computer Communication Networks
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Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Presented Papers -- Accurate Shape Analysis for Recursive Data Structures -- Cost Hierarchies for Abstract Parallel Machines -- Recursion Unrolling for Divide and Conquer Programs -- An Empirical Study of Selective Optimization -- MaJIC: A Matlab Just-In-Time Compiler -- SmartApps: An Application Centric Approach to High Performance Computing -- Extending Scalar Optimizations for Arrays -- searching for the Best FFT Formulas with the SPL Compiler -- On

Materializations of Array-Valued Temporaries -- Experimental Evaluation of Energy Behavior of Iteration Space Tiling -- Improving Offset Assignment for Embedded Processors -- Improving Locality for Adaptive Irregular Scientific Codes -- Automatic Coarse Grain Task Parallel Processing on SMP Using OpenMP -- Compiler Synthesis of Task Graphs for Parallel Program Performance Prediction -- Optimizing the Use of High Performance Software Libraries -- Compiler Techniques for Flat Neighborhood Networks -- Exploiting Ownership Sets in HPF -- A Performance Advisor Tool for Shared-Memory Parallel Programming -- A Comparative Analysis of Dependence Testing Mechanisms -- Safe Approximation of Data Dependencies in Pointer-Based Structures -- OpenMP Extensions for Thread Groups and Their Run-Time Support -- Compiling Data Intensive Applications with Spatial Coordinates -- Posters -- Efficient Dynamic Local Enumeration for HPF -- Issues of the Automatic Generation of HPF Loop Programs -- Run-Time Fusion of MPI Calls in a Parallel C++ Library -- Set Operations for Orthogonal Processor Groups -- Compiler Based Scheduling of Java Mobile Agents -- A Bytecode Optimizer to Engineer Bytecodes for Performance.

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### Sommario/riassunto

This volume contains the papers presented at the 13th International Workshop on Languages and Compilers for Parallel Computing. It also contains extended abstracts of submissions that were accepted as posters. The workshop was held at the IBM T. J. Watson Research Center in Yorktown Heights, New York. As in previous years, the workshop focused on issues in optimizing compilers, languages, and software environments for high performance computing. This continues a trend in which languages, compilers, and software environments for high performance computing, and not strictly parallel computing, has been the organizing topic. As in past years, participants came from Asia, North America, and Europe. This workshop reflected the work of many people. In particular, the members of the steering committee, David Padua, Alex Nicolau, Utpal Banerjee, and David Gelernter, have been instrumental in maintaining the focus and quality of the workshop since it was first held in 1988 in Urbana-Champaign. The assistance of the other members of the program committee – Larry Carter, Sid Chatterjee, Jeanne Ferrante, Jans Prins, Bill Pugh, and Chau-wen Tseng – was crucial. The infrastructure at the IBM T. J. Watson Research Center provided trouble-free logistical support. The IBM T. J. Watson Research Center also provided financial support by underwriting much of the expense of the workshop. Appreciation must also be extended to Marc Snir and Pratap Pattnaik of the IBM T. J. Watson Research Center for their support.

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