1. Record Nr. UNISA996465794003316

Titolo	Programming Languages and System Architectures [[electronic resource]] : International Conference, Zurich, Switzerland, March 2 - 4, 1994. Proceedings / / edited by Jürg Gutknecht
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1994
ISBN	3-540-48356-X
Edizione	[1st ed. 1994.]
Descrizione fisica	1 online resource (CCCLX, 348 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 782
Disciplina	005.13
Soggetti	Architecture, Computer Electronic circuits Software engineering Computer programming Programming languages (Electronic computers) Computer System Implementation Circuits and Systems Software Engineering/Programming and Operating Systems Programming Techniques Software Engineering Programming Languages, Compilers, Interpreters
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Interconnecting computers: Architecture, technology, and economics -- Languages and interactive software development -- Mechanized support for stepwise refinement -- Hardware and software: The closing gap -- On computing power -- Increasing memory bandwidth for vector computations -- The advantages of machine-dependent global optimization -- Dependence-conscious global register allocation -- Type test elimination using typeflow analysis -- Where concurrent processes originate -- High-level abstractions for efficient concurrent systems -- Language and architecture paradigms as object classes: A unified approach towards multiparadigm programming -- Engineering a programming language: The type and class system of Sather -- OPAL:

Design and implementation of an algebraic programming language -- Architectural issues in spreadsheet languages -- Technological steps toward a software component industry -- Distributed high-level module binding for flexible encapsulation and fast inter-modular optimization -- Is Oberon as simple as possible? A smaller object-oriented language based on the concept of module type -- On the essence of Oberon -- Adding concurrency to the Oberon system.

Sommario/riassunto

Programming languages and system architectures are at the frontiers of two different worlds. The conference on which this book is based was an adventure in a land where the two worlds - the formal world of algorithms and the physical world of electronic circuits - interact. The participants explored this land under the guidance of internationally renowned researchers such as Butler W. Lampson, Susan Graham, Jan L. A. van de Snepscheut, and C.A.R. Hoare, all of whom gave invited papers. The volume includes these papers together with sixteen session papers. Subjects of special interest include: programing language design and history, programming environments, programming methods, operating systems, compiler construction, and innovative system architectures.