

1. Record Nr.	UNISA996465787803316
Titolo	Functional Programming Languages and Computer Architecture [[electronic resource]] : Portland, Oregon, USA, September 14-16, 1987. Proceedings // edited by Gilles Kahn
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1987
ISBN	3-540-47879-5
Edizione	[1st ed. 1987.]
Descrizione fisica	1 online resource (VIII, 472 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 274
Disciplina	003.3
Soggetti	Architecture, Computer Programming languages (Electronic computers) Computer programming Microprocessors Computer System Implementation Programming Languages, Compilers, Interpreters Programming Techniques Processor Architectures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Control of parallelism in the Manchester dataflow machine -- The D-RISC—An architecture for use in multiprocessors -- Tim: A simple, lazy abstract machine to execute supercombinators -- The G-machine as a representation of stack semantics -- Categorical multi-combinators -- Evaluating functional programs on the flagship machine -- GRIP — a high-performance architecture for parallel graph reduction -- Concurrent garbage collection on stock hardware -- Matrix algebra and applicative programming -- Attribute grammars as a functional programming paradigm -- The planar topology of functional programs -- Functional programming with sets -- A theory for natural modelisation and implementation of functions with variable arity -- Pomset interpretations of parallel functional programs -- SIGNAL: A declarative language for synchronous programming of real-time systems -- Controlling the behaviour of functional language systems

-- A standard ML compiler -- Performance polymorphism -- Mapping a single-assignment language onto the warp systolic array -- Clean — A language for functional graph rewriting -- Projections for strictness analysis -- Detecting sharing of partial applications in functional programs -- Finding fixed points in finite lattices -- Evaluation transformers — A model for the parallel evaluation of functional languages (extended abstract).

Sommario/riassunto

This volume contains the proceedings of the Third Conference on Functional Programming Languages and Computer Architecture held in Portland, Oregon, September 14-16, 1987. This conference was a successor to two highly successful conferences on the same topics held at Wentworth, New Hampshire, in October 1981 and in Nancy, in September 1985. Papers were solicited on all aspects of functional languages and particularly implementation techniques for functional programming languages and computer architectures to support the efficient execution of functional programs. The contributions collected in this volume show that many issues regarding the implementation of Functional Programming Languages are now far better understood.
